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THE FAR EASTERN REVIEW

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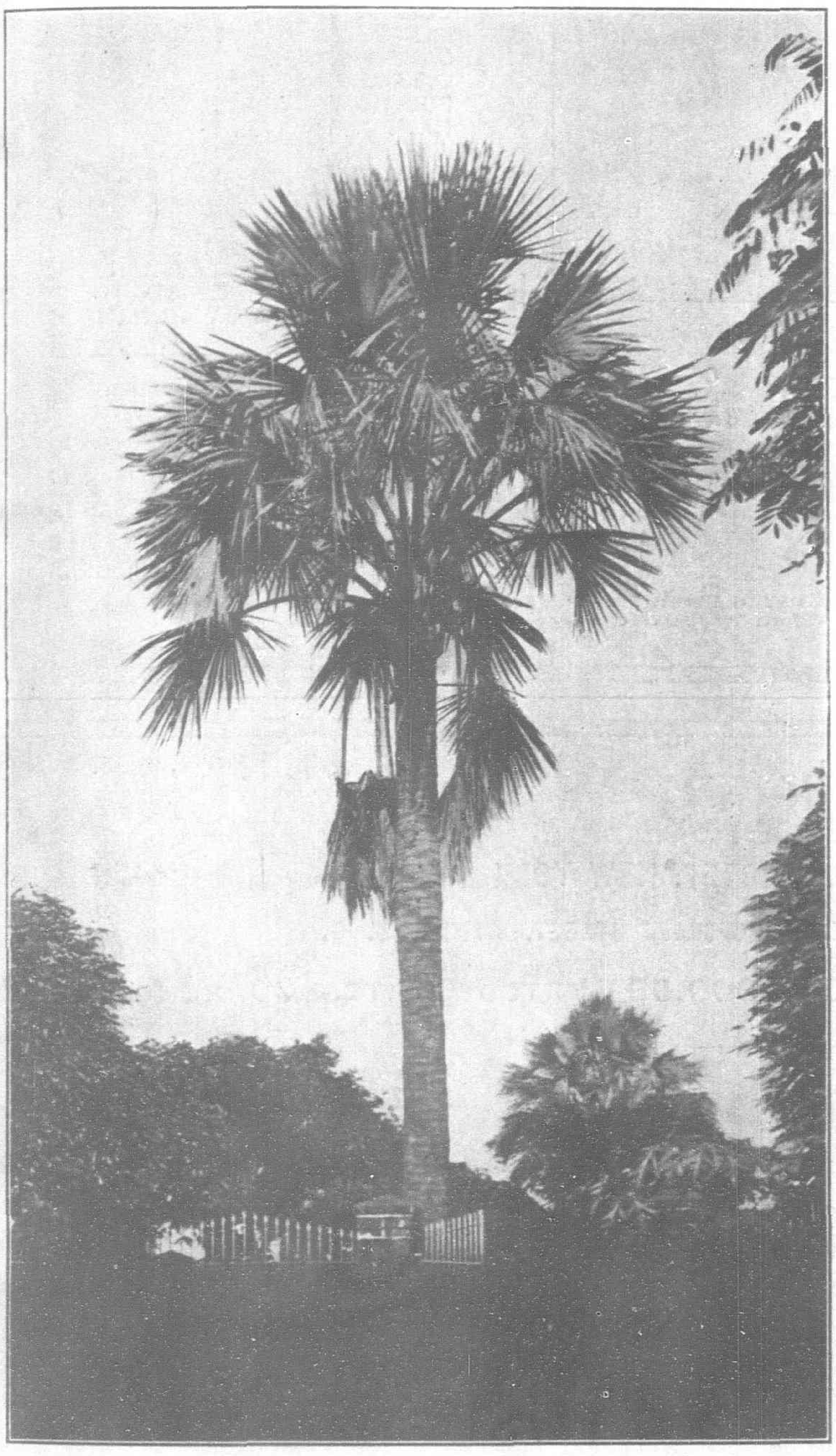

The Buri Palm, One of Most Valuable Sources for Hat Material in the Philippines.

The Philippine Hat Industry

❦

Federated Malay States Railways

❦

Trade of Tientsin

❦

Philippine Public Works

❦

General News and Comment

ENGINEERING
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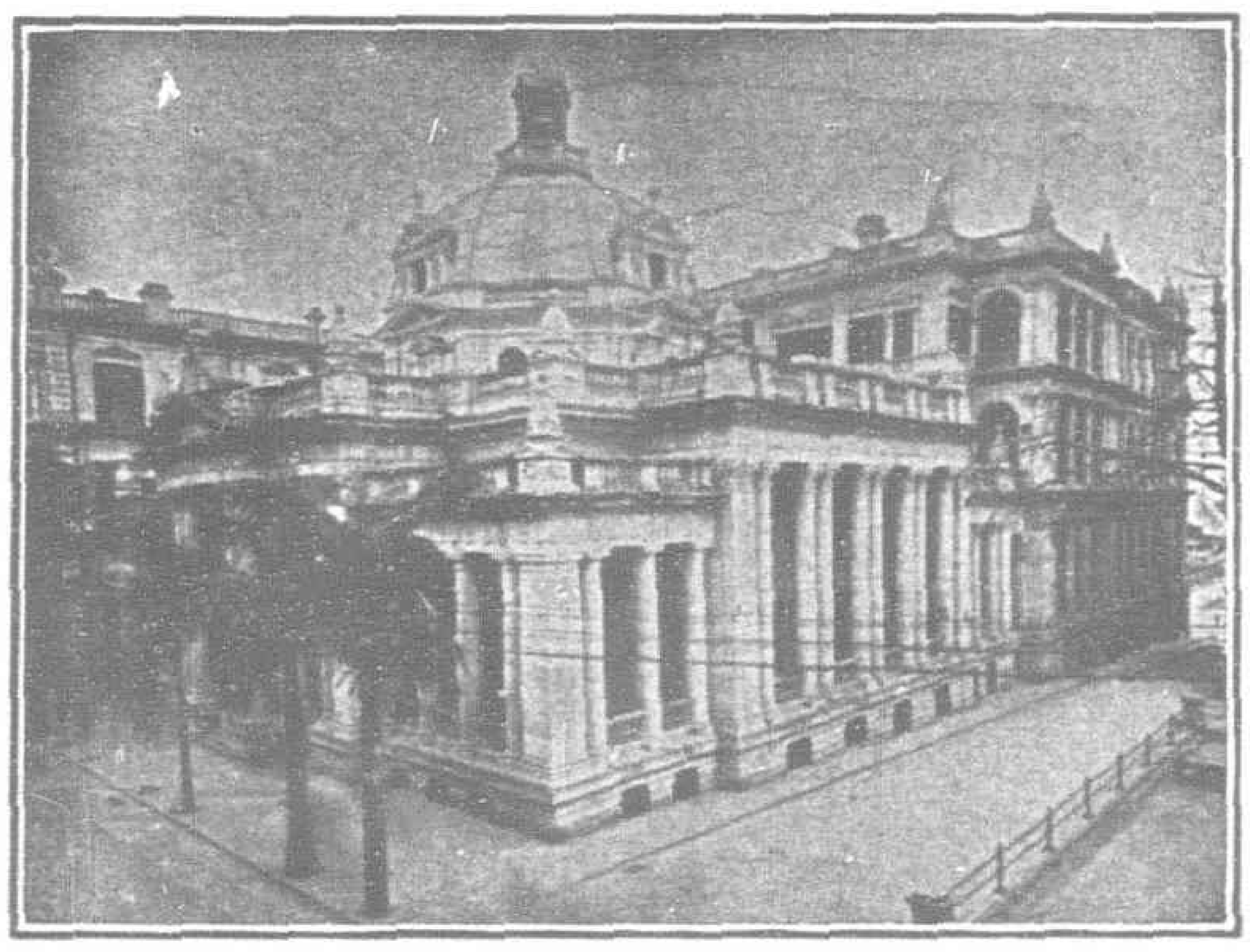

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THE FAR EASTERN REVIEW
COMMERCE ⊛ ENGINEERING ⊛ FINANCE

VOL. VII. MANILA, P. I., SHANGHAI, AND YOKOHAMA, DECEMBER, 1910 No. 7.

THE PHILIPPINE HAT INDUSTRY

A feature of industrial training, which is characterizing the program of the Department of Public Instruction in the Philippines, is the training of the youth of the Philippines to a greater efficiency in household industries which predominate as a source of livelihood among a large portion of the provincial population. Among these industries hat weaving has been given a place, and in order to proceed wisely and effectively the Director of the Bureau of Education has made a thorough investigation into the present status of the industry throughout the islands and accumulated a volume of data of inestimable value in pushing his educational campaign. As a result we have received a copy of a recent bulletin by Mr. Hugo H. Miller, of the Philippine School of Commerce, which fully covers the history of hat weaving and represents not only careful examination of statistics, but the result of personal investigation covering a period of four years in every section of the islands where this industry may be said to engage even minimum attention. The bulletin is effectively illustrated and through the courtesy of Director Frank R. White we reproduce the plates in this issue.

THE WEAVING OF A PHILIPPINE HAT

In his introduction Director White says:

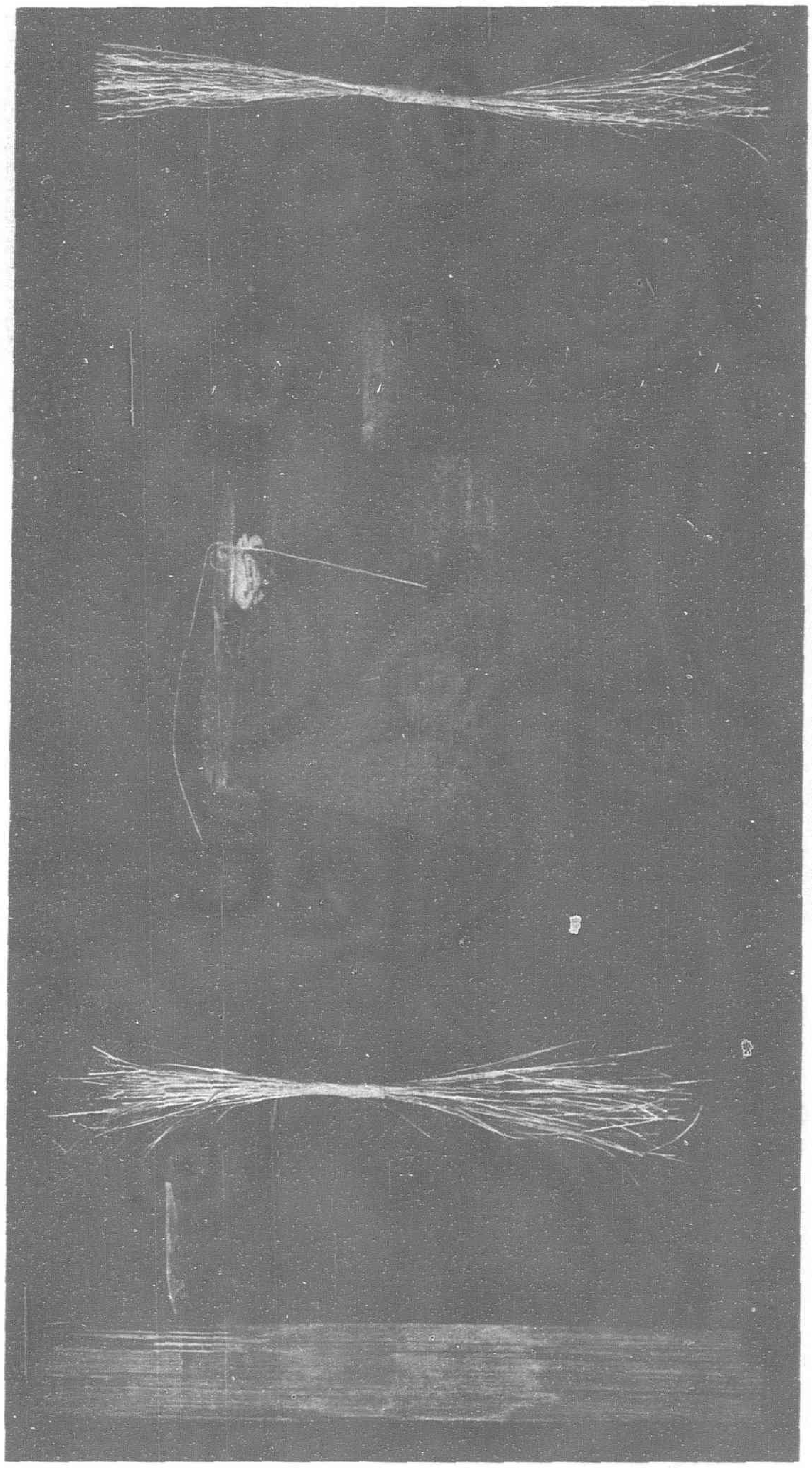
"The Bureau of Education has introduced hat weaving as a prescribed exercise in the primary schools. This is a household industry capable of great development in the Philippines through the agency of the schools. Many raw materials admirably adapted for use in the weaving of hats are widely distributed over the Islands, and others now narrowly localized can be given general distribution. A growing market exists in the United States and Europe, which will accept all the product the Philippines can possibly supply. The local market is demanding constantly a larger output and a higher-grade article. The Bureau of Education considers it one of its legitimate functions to give such training in the making of good hats as will afford a larger number of children a permanent means of earning a livelihood.

"As indicative of the development which is possible for this industry in the Philippines, it may be noted that in the fiscal year 1910 621,375 hats were exported from the Islands, and 189,190 of these went to the United States. These figures represent a very small fraction of the proportions which the hat industry may assume when the Islands are ready to supply the growing demands which are being made for Philippine hats in the world markets.

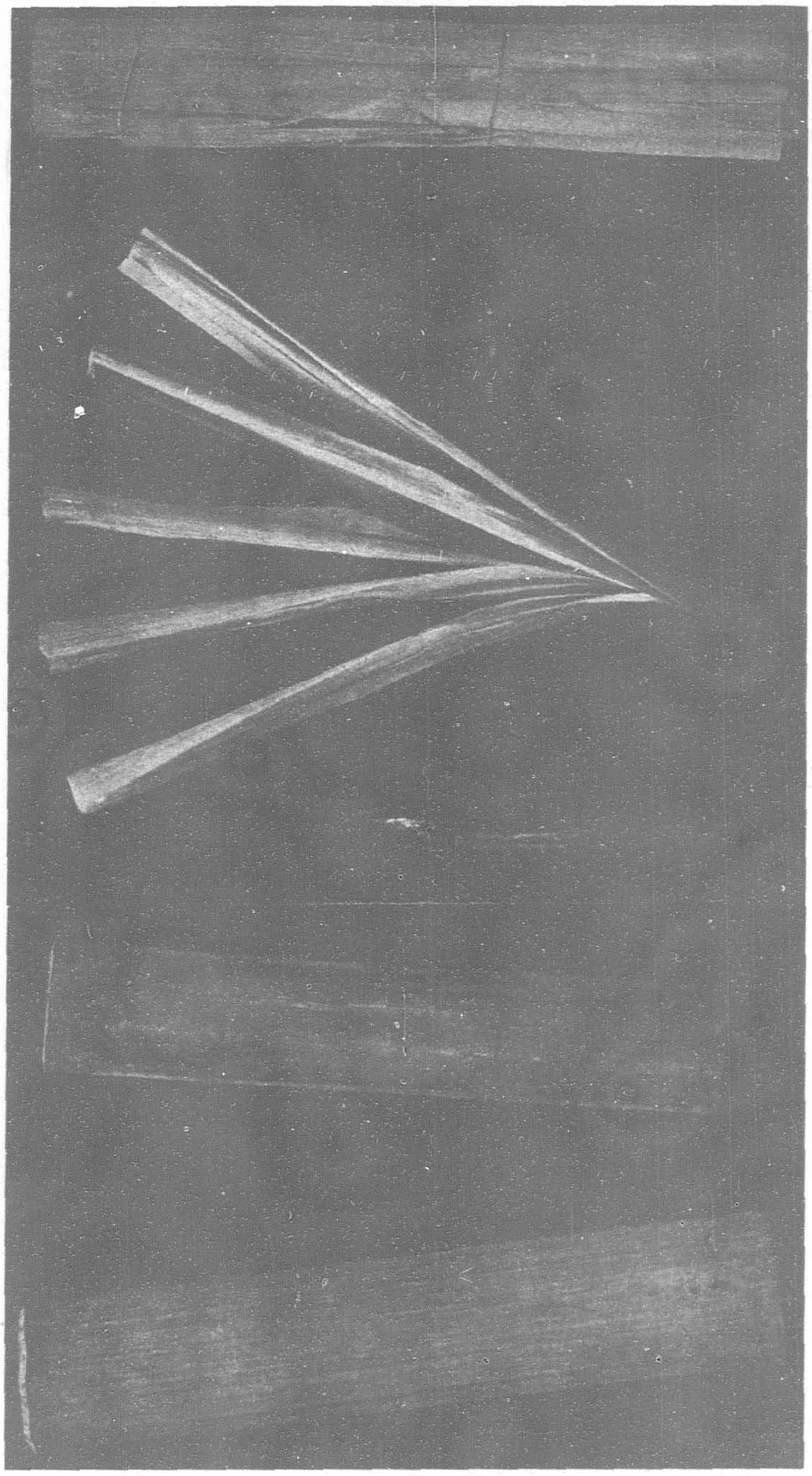
"This report covers a new field. Hat making, like most other minor industries in the Philippines, has never before been the subject of any serious investigation. Mr. Hugo H. Miller, of the Philippine School of Commerce, has here compiled an extensive and reliable body of information. This material has taken four years in its preparation, and has been gathered from students, weavers, hat brokers, exporters, and supervising and industrial teachers throughout the Islands by correspondence and conversation, and personal investigation in hat-producing towns. Upon technical details Mr. Miller has had the assistance of Mr. U. S. Andes, principal of the industrial department, Philippine Normal School."

Present State of Philippine Industries.—Before taking up the subject in detail Mr. Millar gives a comprehensive idea of the present status of this important industry and says:

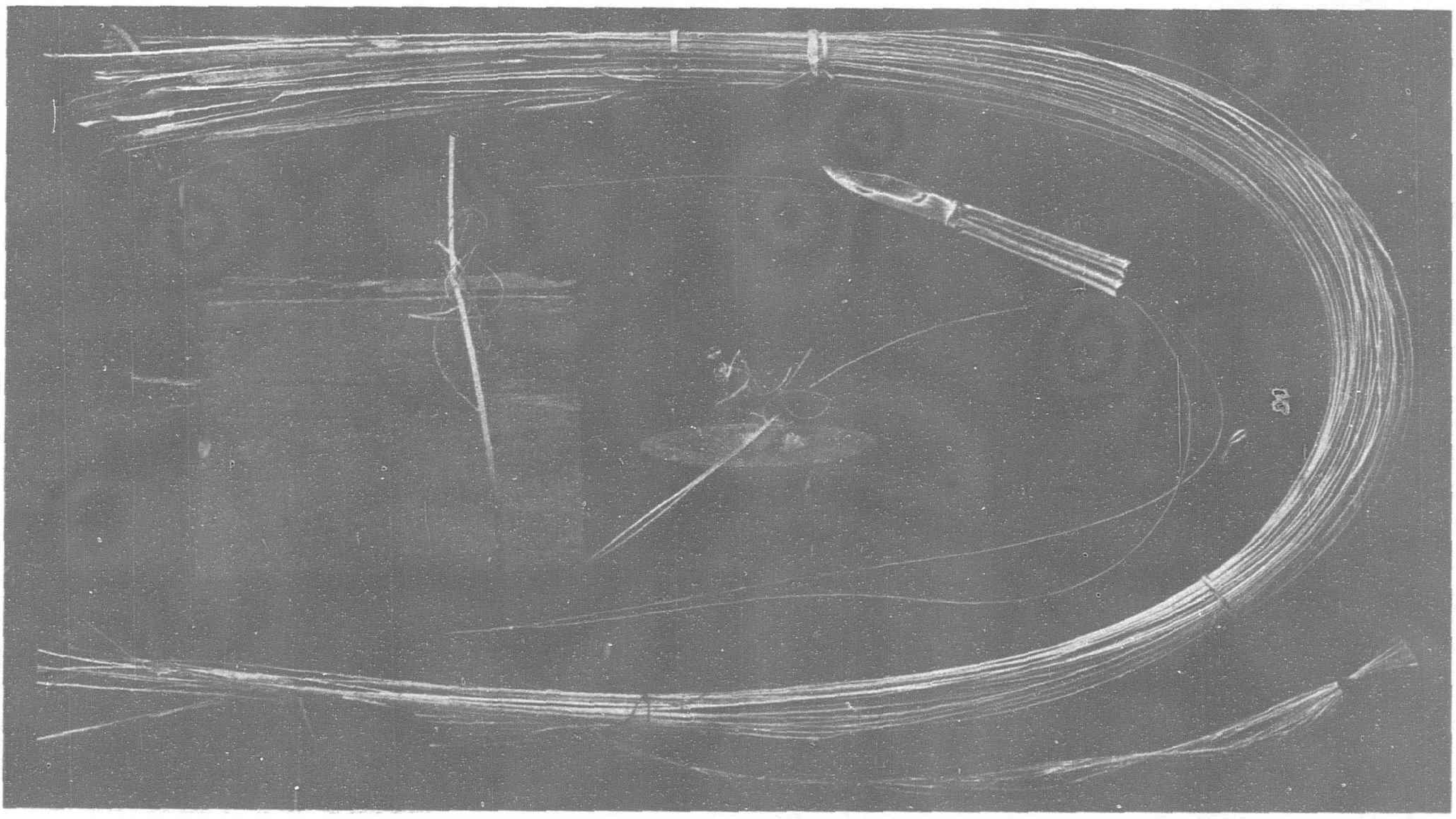
"A considerable source of revenue to provincial households is found in the domestic industries carried on for the most part by the women assisted by the men and children, sometimes in their spare moments, more often as regular employment. The system as carried on to-day in the Philippines bears very close resemblance to that followed in England and on the Continent in the eighteenth century before the industrial revolution, the introduction of machinery and the application of steam and other power to it, and the factory



PREPARATION OF BAMBOO STRAW



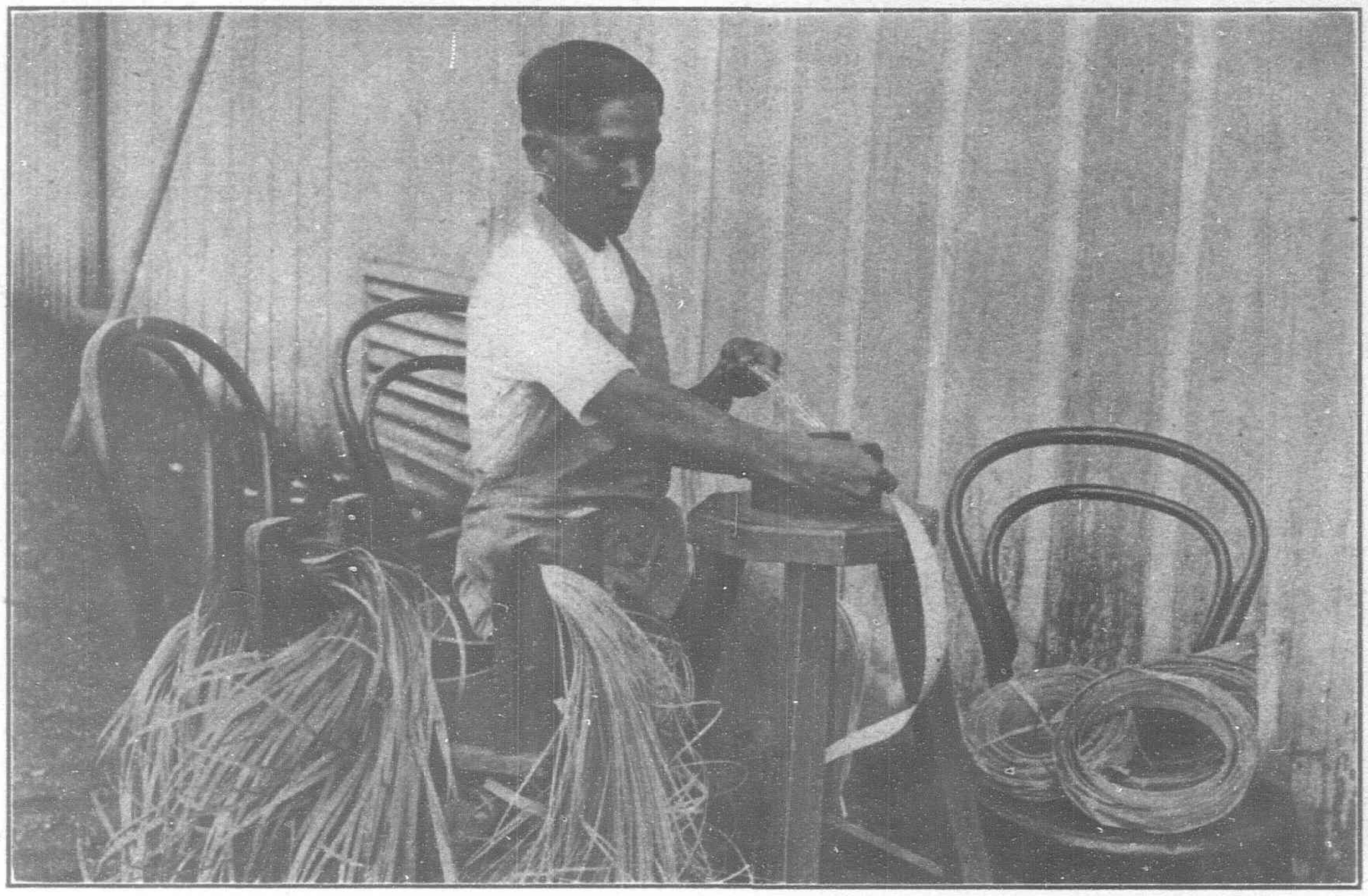
PREPARATION OF BAMBOO LAYERS



PREPARATION OF KALASIAO STRAW

system. The comparison between these systems of household manufacture—the one long since passed away, the other of growing importance—is an interesting subject, but since this report is intended to explain and classify the various products rather than to enter the historical economic interest of the system, such a discussion can not be gone into here; nor will space permit comparison with present systems of domestic industry found in oriental countries, such as Japan, China, and India, and in certain parts of Europe.

"Two general ideas, however, should be emphasized: First, that the production of various hats, mats, textiles, embroideries, and other articles constitutes important industries occupying the time of thousands of persons, bringing into the households thousands of pesos and becoming more and more recognized trades; secondly, that the manufacture of each particular article is limited to particular towns. This concentration is often accounted for by the proximity of the raw material to the town wherein the article is manufactured, as the making of cloth from abaka in Albay, Batangas, and Iloilo; of bamboo hats in Baliwag. Pandan mats have long been woven there. In 1904 a woman was brought from Lukban to teach the weaving of buntal hats. Advance was slow at first, but finally a class of twelve girls was formed. The teacher was eventually sent back to Lukban and one of the girls took her place. Soon the women of the town became interested in the weaving and were taught by the schoolgirls, so that to-day Mahayhay has quite an export of buntal hats. The bury-hat industry was introduced in the same way and with equal success.



PREPARATION OF BURI STRAW BETWEEN RAZOR BLADES

"While many workers make loom weaving, hand weaving, or embroidering their vocation, the natural time of household industries is in spare hours, as between harvests and during idle moments between duties of the household, just as in Europe the long winters and spare hours are turned into funds by making toys, embroidery, hat braids, and other articles."

The bulletin contains an exhaustive description of the materials used, the processes of preparation, the methods of weaving, blocking, bleaching, and goes into the question of the availability of material and processes as affecting the cost, with relative quality and durability of product. He writes: "The qualities of these hats depend chiefly on the kind of straw used. The word straw must not be taken to mean the stalks of cereals, such as rice and wheat. It is here intended to mean the prepared strips of grass, midrib, or leaf used to weave into hats."

Again, "Hat straw differs from each other in strength, but while their tensile strength, which is of such importance in ropes, is a factor, their toughness is of even more importance, for many straws, which will break easily when pulled, make excellent hat material, since they will not crack upon being bent, and have the quality of not wearing away easily. A quality of softness might here be included, since the harsh straws like bamboo are usually easily cracked, while the soft straws, such as the Kalasiao and the Sabutan, are usually tougher. The tensile strength of hat straw is of chief importance in regard to the weaving, for the material must then have sufficient strength not to break. (Kalasiao is a term applied to hats made from the midrib of the unopened buri palm leaf at a town of that name.)

The Bamboo Hat.—The two principal products from which the commercial hat is manufactured at the present time are bamboo and the buri-palm. The output of bamboo hats for local use and export exceed any other kind. The bamboo is cut and left to wither in the shade for about five days when it is cut into sections at the node. The middle sections are available only as the bottom sections would produce material too short and the top, straw too weak. These pieces are split by an expert process into sections so that the result gives one-eighth the original thickness, including the green outer skin. "The remaining strip of bamboo is flattened by placing one end on a bench and forcing the rest down flat so as to remove the curve. The stripper then cuts two lines across the top, one deeper than the other, but not through the material, and pries and pulls the bamboo into three layers (lapat), each of which can again be reduced to thinner layers in the same manner, so that from four to ten layers, besides the green outer skin (balat), can be obtained, though the usual number is five or six, and it is very seldom that more than eight are produced. The layers are then boiled in water for about half an hour and bleached in the sun—a strengthening and whitening process."

"The bamboo layers are divided into grades according to their distance from the green outer skin. While the green skin is useless and is thrown away, the layers next to it produce the best material, it being of dark straw color and of the strongest and finest texture. As the layers occur farther away from the skin they become lighter in color, of less strength, and coarser in texture."

He points out that the finest hats are manufactured from layers Nos. 1 and 2 and commercially the weavers' prices range from 30 centavos to ₱25 and cases have been reported where a bamboo hat has been sold for ₱300. The Manila market is supplied with the medium grades and the export comprises the medium and coarser grades. In concluding reference to bamboo hats, Mr. Miller says:

"Bamboo hats are not as long-lived as most Philippine export hats, but they must be considered a strong hat nevertheless. As already stated, they are the chief export hat of the Philippines, being sent in increasing numbers annually to Europe and to the United States, where they are known under the name of Java[1] or Manila hats. One sees a great many bamboo hats in the United States worn by both men and women. Hat pins are liable to damage bamboo materially, punching it full of holes. This is sometimes obviated by using patent fasteners, which fasten the hat underneath the crown. The hats do not keep their shape well without size, although it should be noted that weavers are now beginning to put a stiffening of sinamay between the two pieces of the double hat. Bamboo bleaches very well and easily, though it does not hold the bleach as well as the Kalasiao straw."

"The chief hat qualities of bamboo are therefore the ease with which the straw can be prepared, the large quantity of raw material at hand, the varying fineness of straw which can be so easily made, the flexibility of the straw facilitating weaving, and the ease with which it is bleached and dyed. These are the causes, undoubtedly, which

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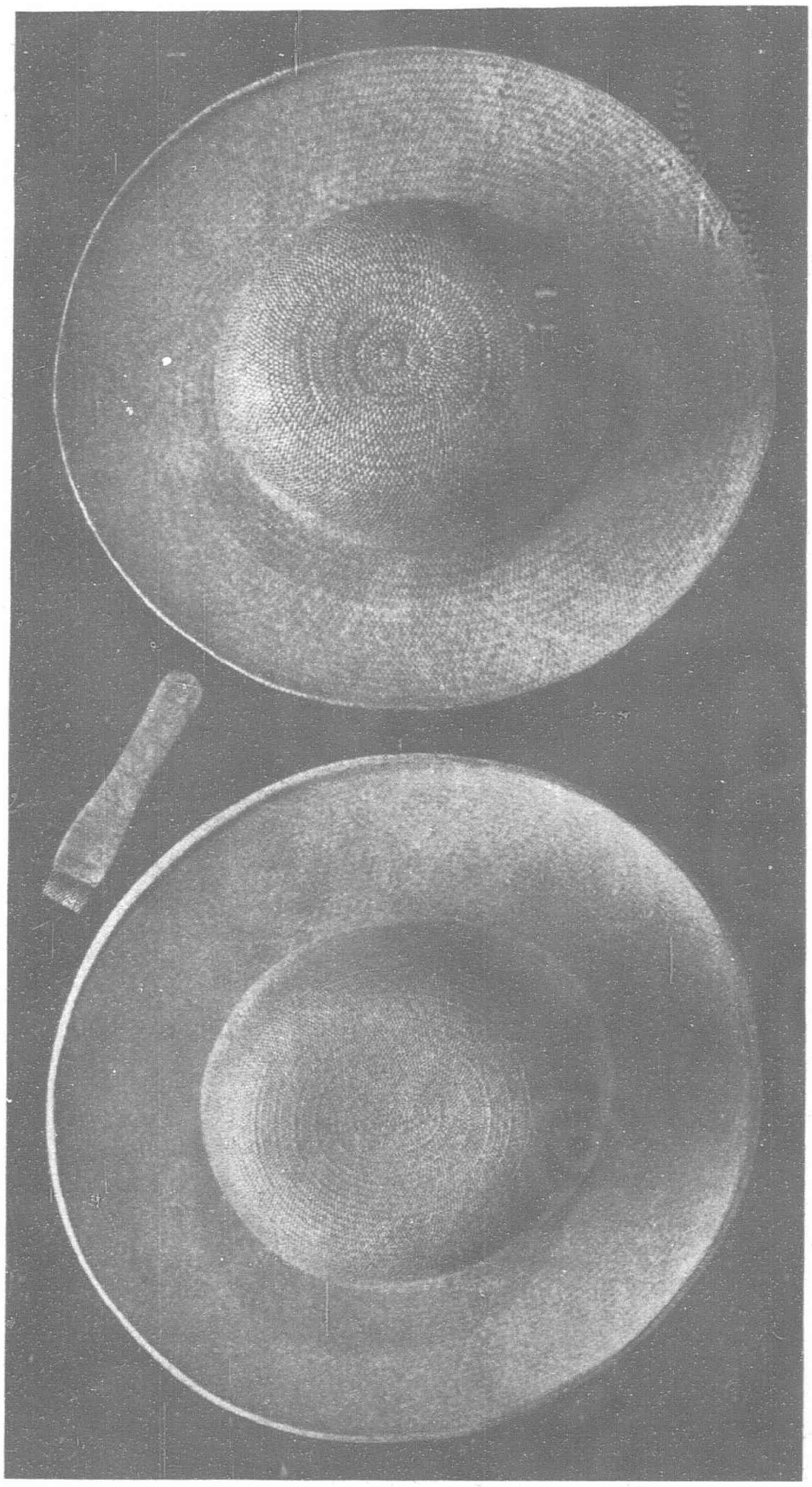
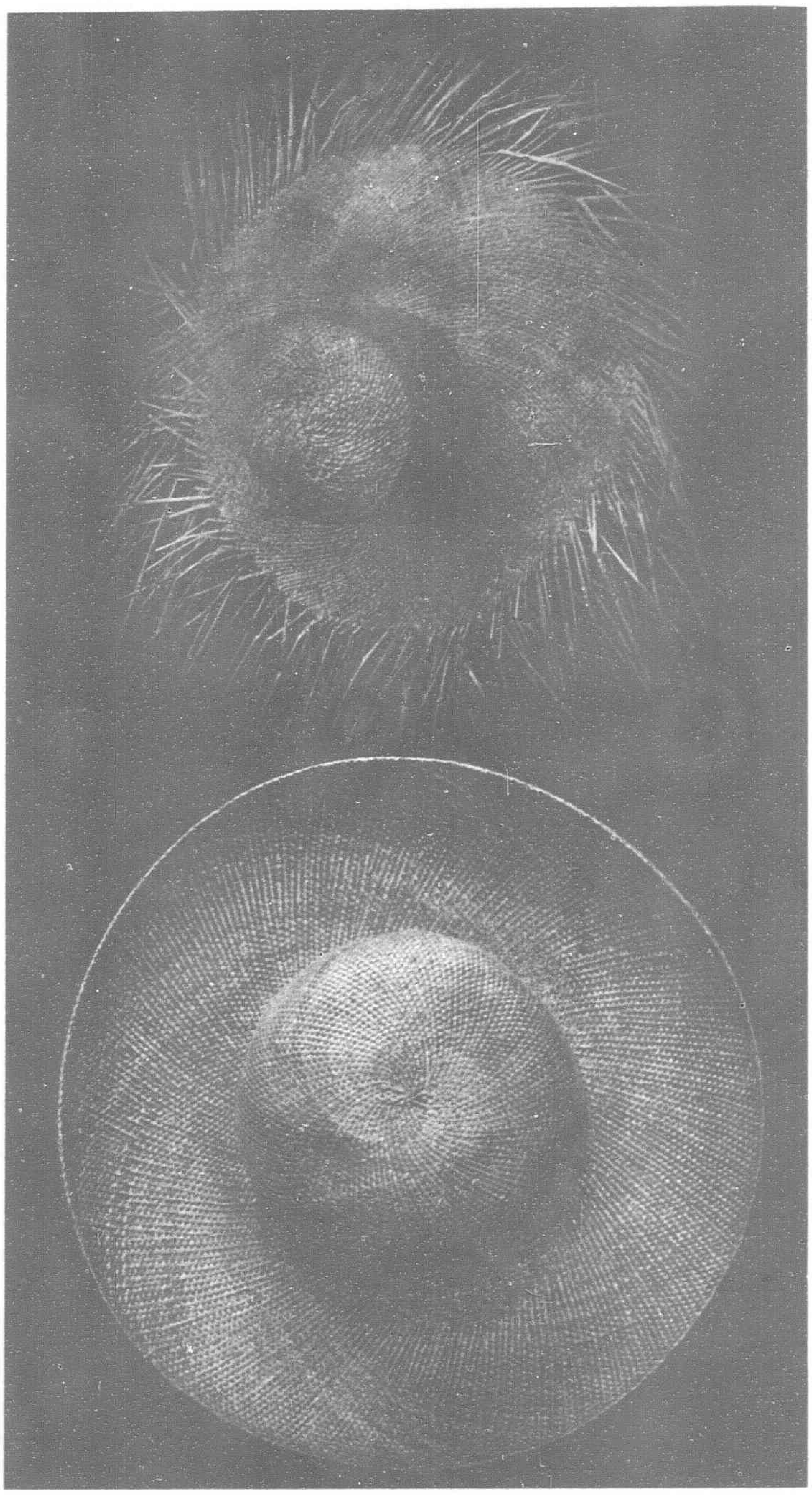
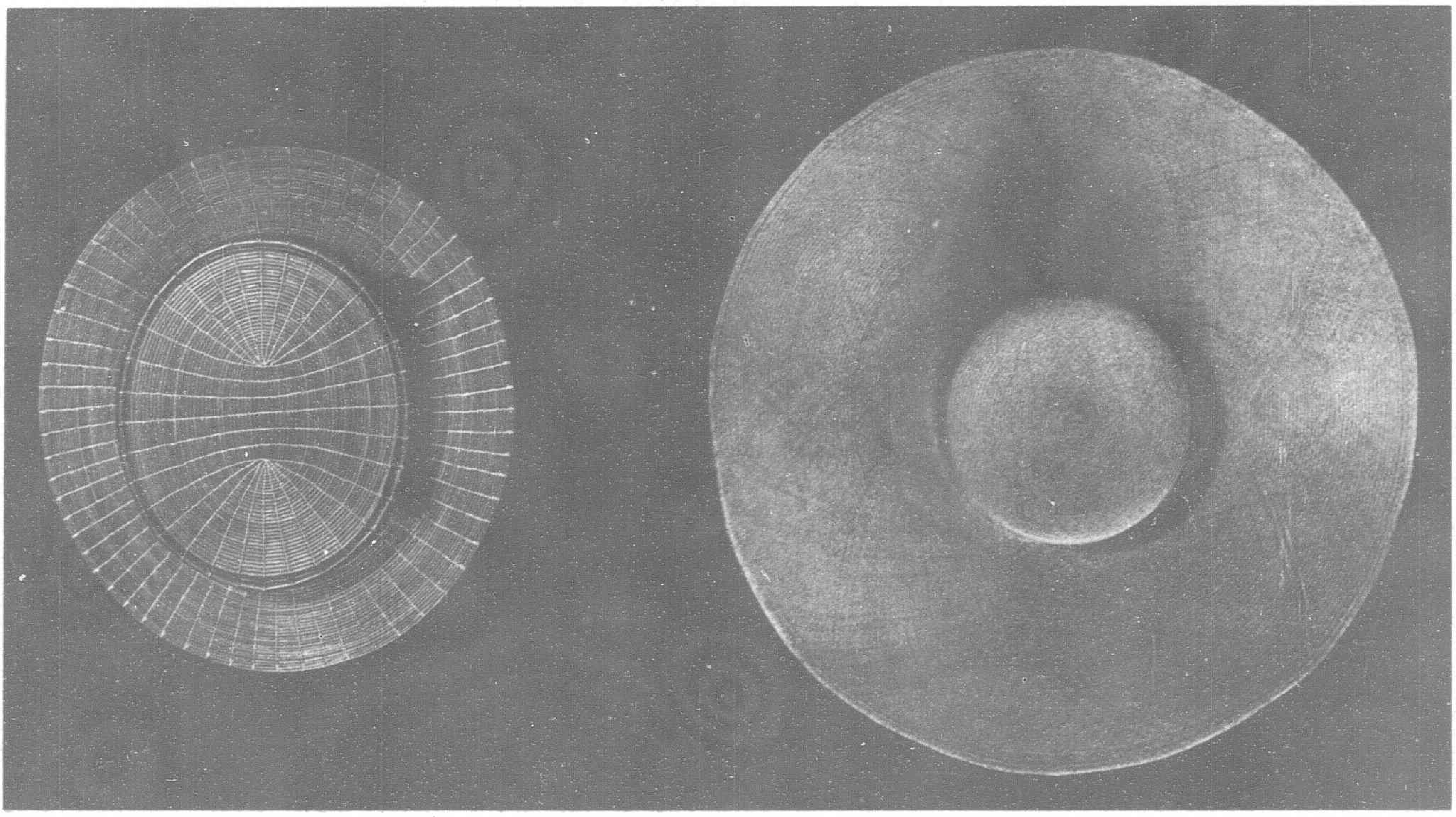
(1) In 1907 Java exported bamboo hats to the value of $211,000, United States currency, to the United States alone.



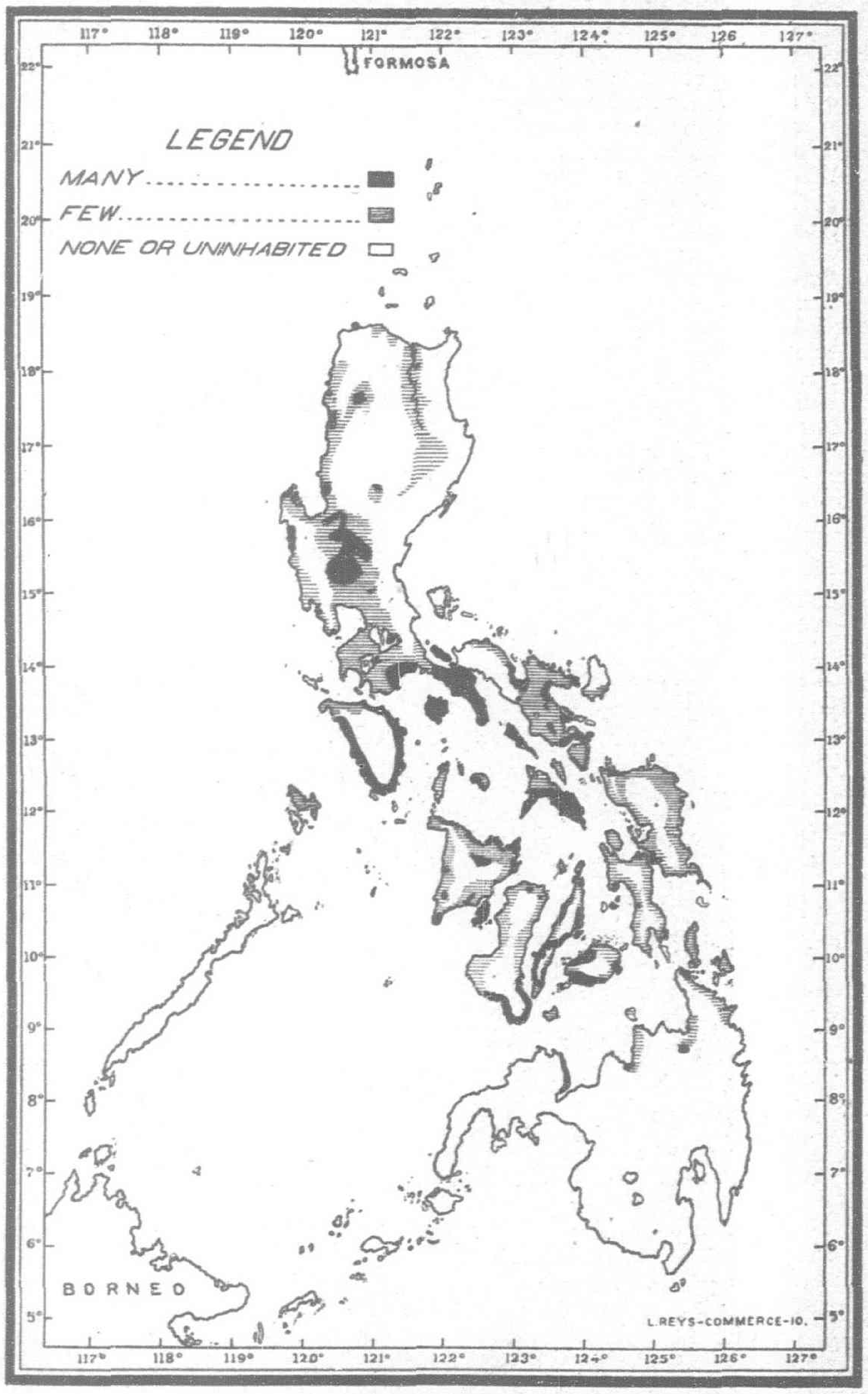
GRADES OF SABUTAN HATS AND THE SABUTAN COMB



PANDAN AND TIKUG HATS



VETIVER AND BUNTAL-SAWALI HATS



DISTRIBUTION OF THE BURI PALM IN THE PHILIPPINES

have led the bamboo hat to be the chief export hat of the Philippines and the one which can now be obtained in largest quantities. But the advisability of encouraging its production in the schools is doubtful. Although the bamboo hat has an established market, there are other materials which, though not equaling it in the above qualities, yet surpass it in other ways and produce hats which are stronger, not so easily damaged by hat pins, require less or no size in blocking, and give weavers higher wages on account of the demand for hats made from them."

"*Buri-Palm Straws.—Uses of the Buri-Palm.*—The buri palm is one of the most valuable palms grown in the Philippines. In the variety of its useful products, it exceeds either the coconut palm or the nipa palm in local importance, though the value of the products of the coconut palm far exceeds the value of its products in pesos and centavos, and, when we consider the large amount of alcohol obtained from the nipa palm, the products of buri may also be of less monetary importance than those of the nipa. From the buri a juice is obtained which can be fermented into a wine, boiled down to sirup, or further boiled and crystallized into a palm sugar. The young fruit kernel is edible, being usually cooked in sugar, and the kernel of the matured fruit is so hard that it is used in the Philippines to form into rosary beads, and in Europe, whence it is exported from India, to make into buttons and like articles. The palm drops its leaves and produces a large bunch of fruit after reaching a very old age, variously estimated at between 25 and 40 years. It then dies. The trunk contains a large quantity of starch, often extracted and eaten. In fact, this starch is, with venison, the staple article of diet in the southern Tayabas peninsula outside of the towns of Katanawan and Mulanay. Buri sugar is almost exclusively eaten there, and what little money the people receive is earned by selling bundles of the dried unopened leaves and making mats, which are used in Manila to cover hemp bales, and bayones, which are shipped out for use as sugar containers.[1]

"Four valuable straws are produced from different parts of the palm. Raffia is the outside skin of the unopened leaf. It is dark yellow in color and is serviceable in making

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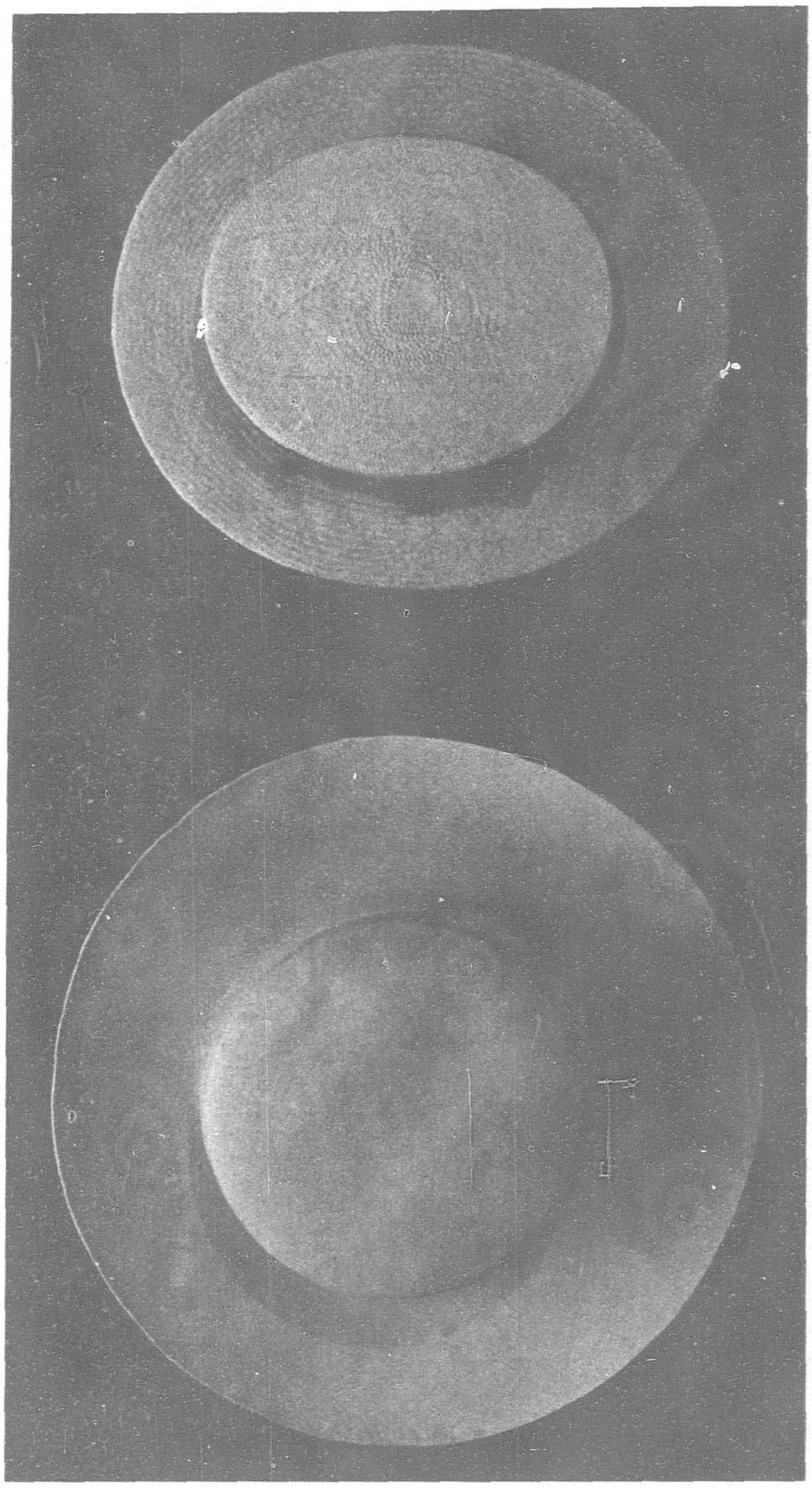
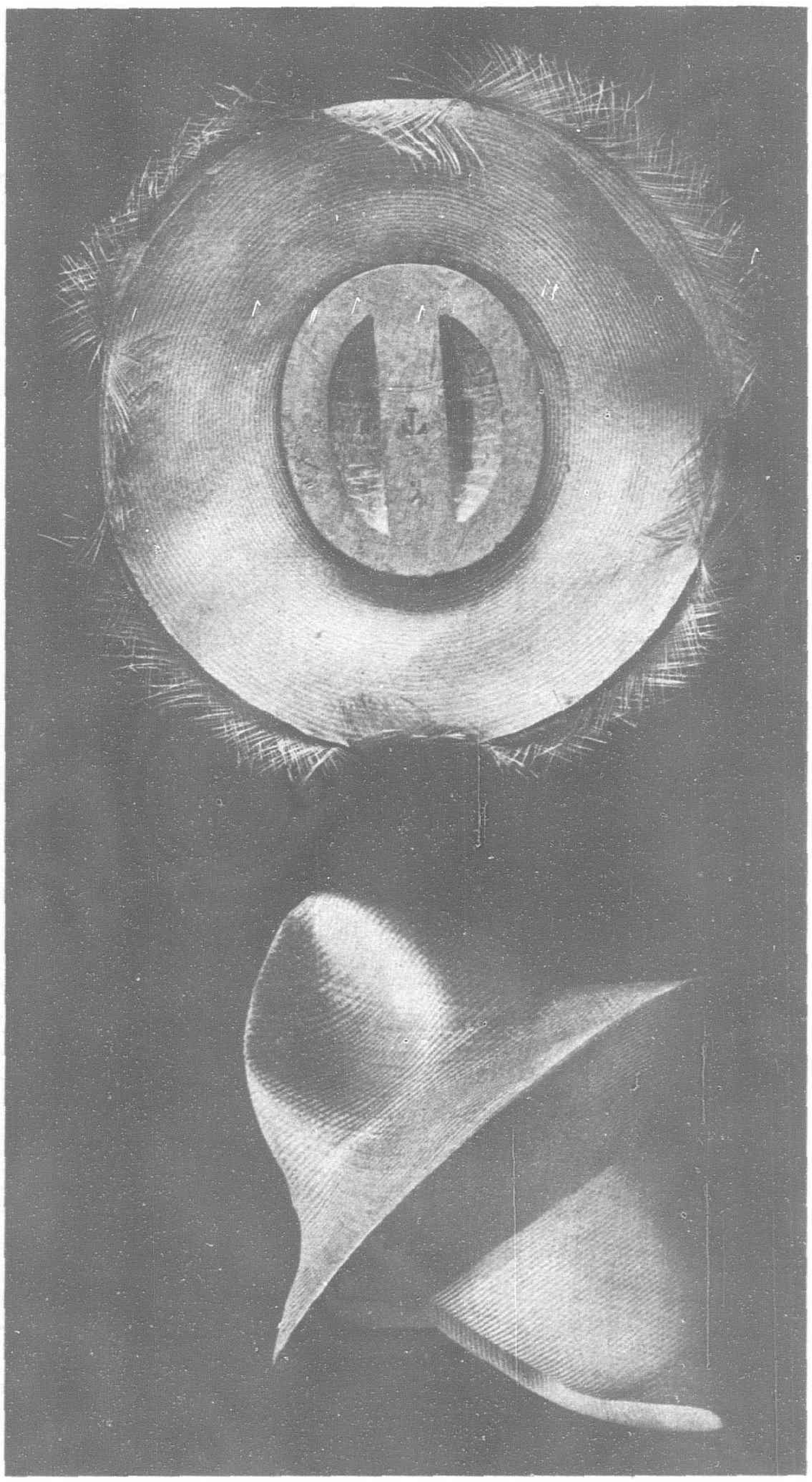
(1) Buri starch should not be confused with the starch (yuro) of the sugar palm (kaong; hibiok; irok; cabonegro palm), which is eaten among the Mangyans of Mindoro, and is also now being used by the Christian Filipinos of that island.

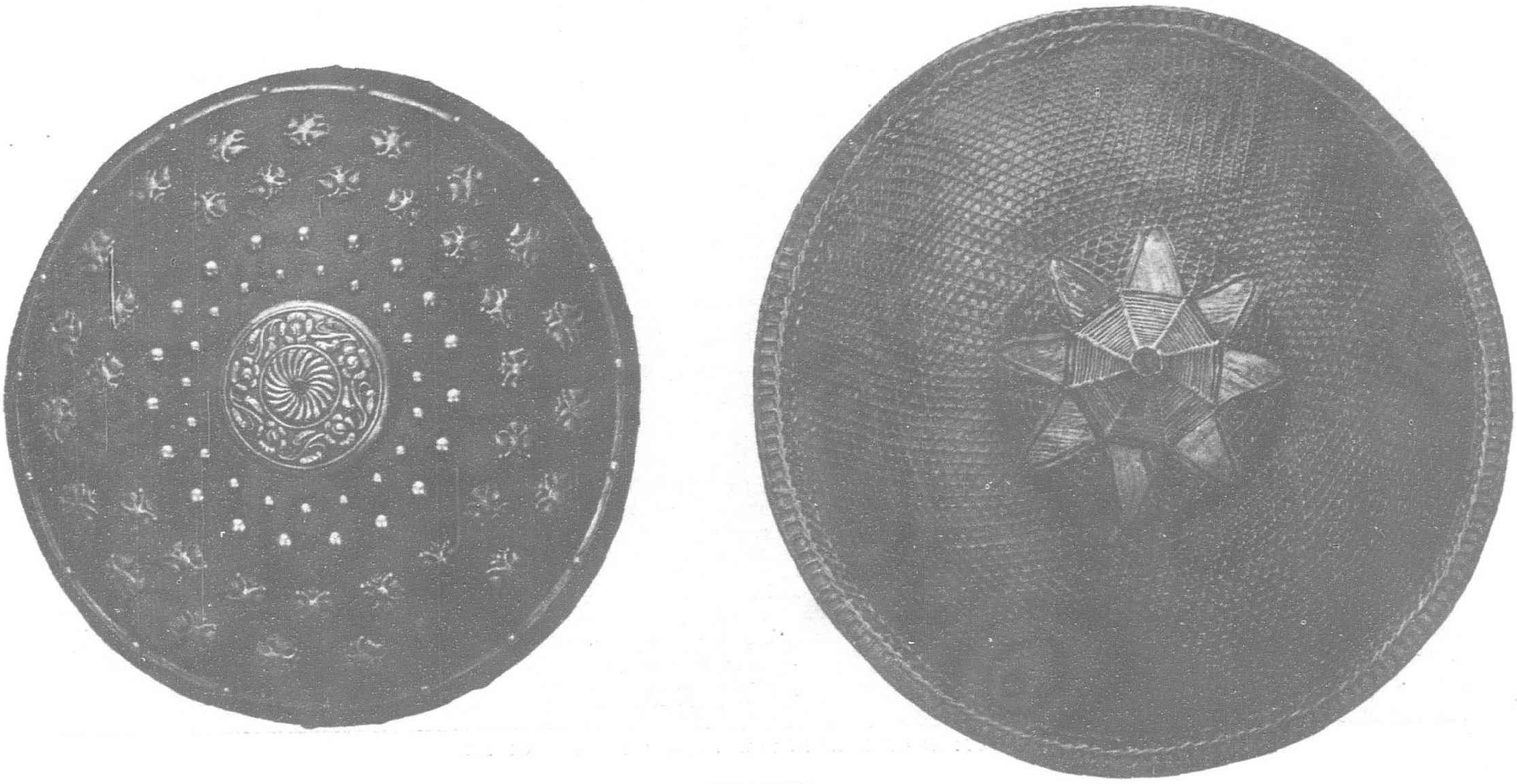
PREPARATION OF BURI STRAW WITH A BAMBOO GUIDE



GRADES OF KALASIAO HATS



THE DOUBLE HAT



SALAKOTS

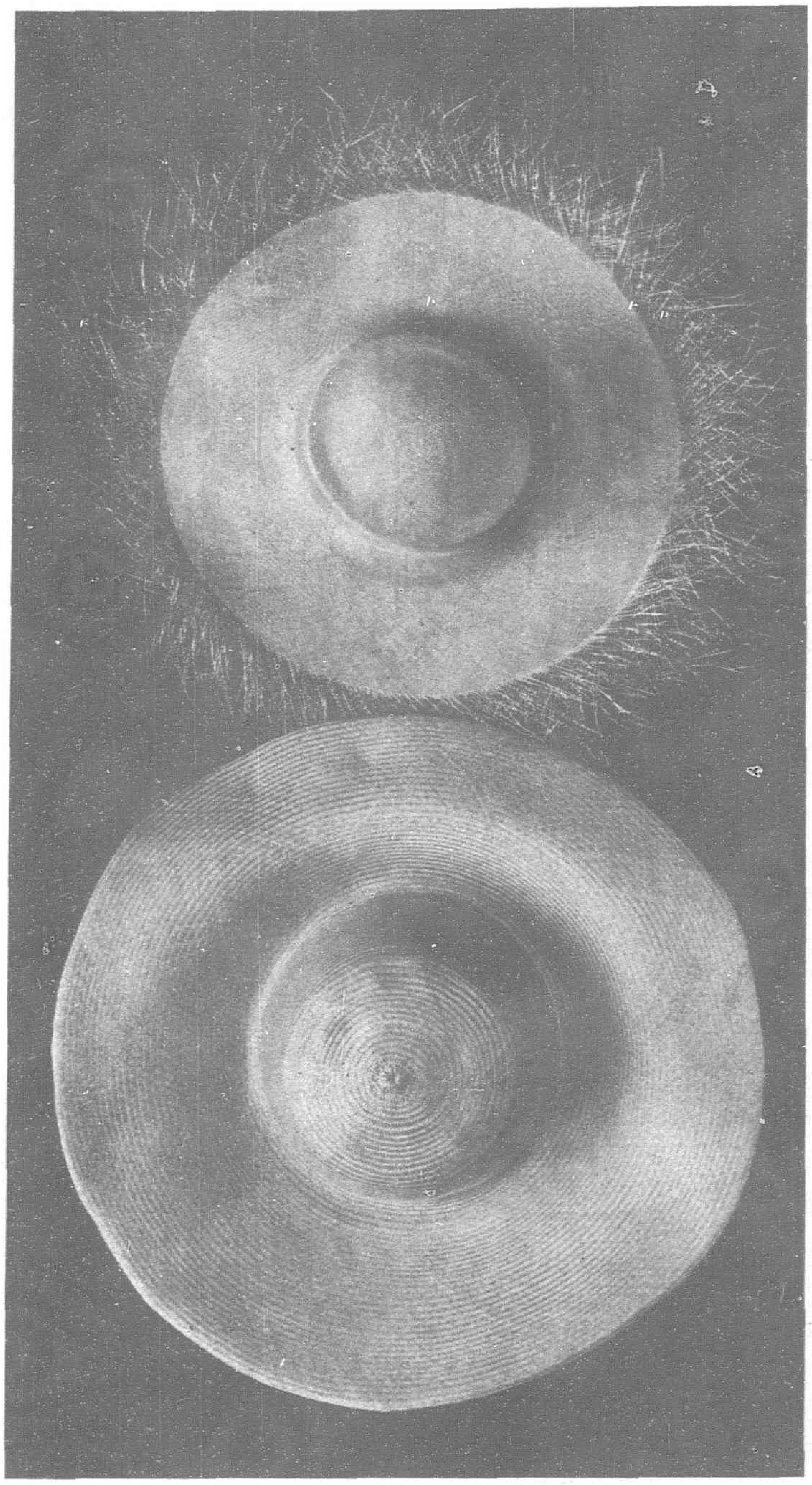
many pretty articles in the lower grades of schools. Raffia is also produced from the skins of several other plants as the common banana and abaka. Buri raffia seems to be the most satisfactory of those produced in the Philippines. The true raffia of commerce comes from Africa and Madagascar, and is used by nurserymen in tying up plants. It can also be used for weaving into a peculiar and rather pretty cloth. In Bohol buri raffia (saguran) is woven into colored floor mats, blankets, curtains, and cloth used to wrap tobacco. Such a cloth is said to be produced in Marinduque from buri raffia and is used for petates, sails, and even the clothes of the poor. The other three straws from the buri palm—namely, buri straw, Kalasiao straw, and buntal straw—are very important in hat making in the Philippines. They are taken up separately below.

"It is a peculiar fact that only one of the straws is usually produced in a given place, and the other parts are allowed to go to waste. In fact although the production of buri straw is widespread, buntal and Kalasiao straws are each commercially produced only in two districts. There are many large growths of buri palms which are now being used for no fiber production.

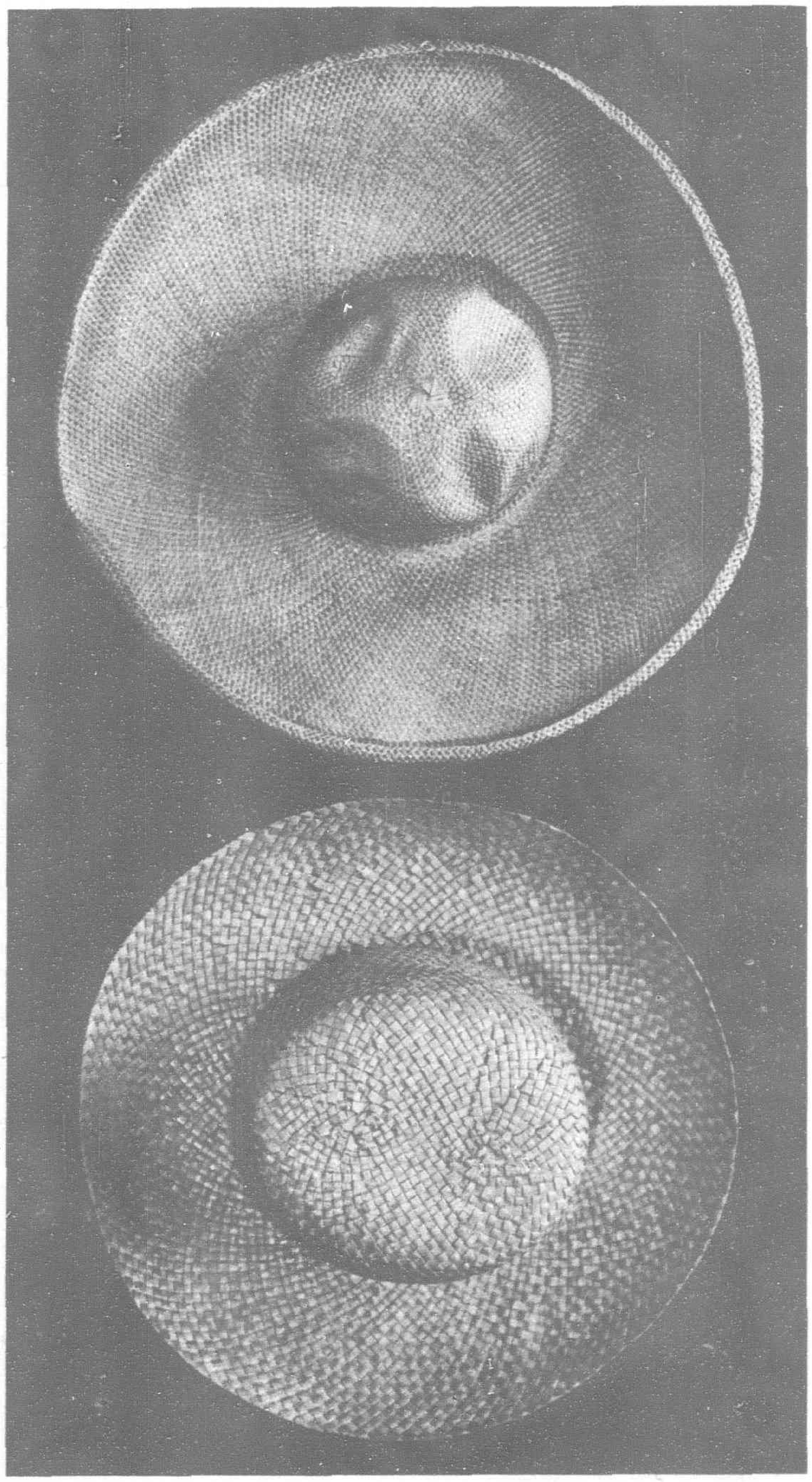
- The Buri Palm
  - Unopened leaf......
    - Blades...
      - Rope.
      - Raffia..
        - Cloth.
        - Fancy articles.
        - String.
      - Buri...
        - Buri hats.
        - Mats.
        - Bayones.
        - Baskets.
        - Fancy articles.
    - Midrib..
      - Kalasiao or Pototan hats.
      - Rope.
  - Opened leaf......
    - Leaf.....
      - Roofing and walls of houses.
      - Covering for tobacco bales.
      - Fans, etc.
      - Midribs for brooms.
    - Stem (petiole)
      - Buntal straw and hats.
      - Rope.
  - Sap (tubá)
    - Fermented drink (tubá).
    - Sirup.
    - Vinegar.
    - Alcohol.
    - Palm sugar.
  - Fruit......
    - Young fruit kernel is edible.
    - Old kernel
      - Rosary beads.
      - Buttons.
  - Trunk.....
    - Starch.
    - Bark for soles of sandals.
    - Wood for fences.

PANDAN

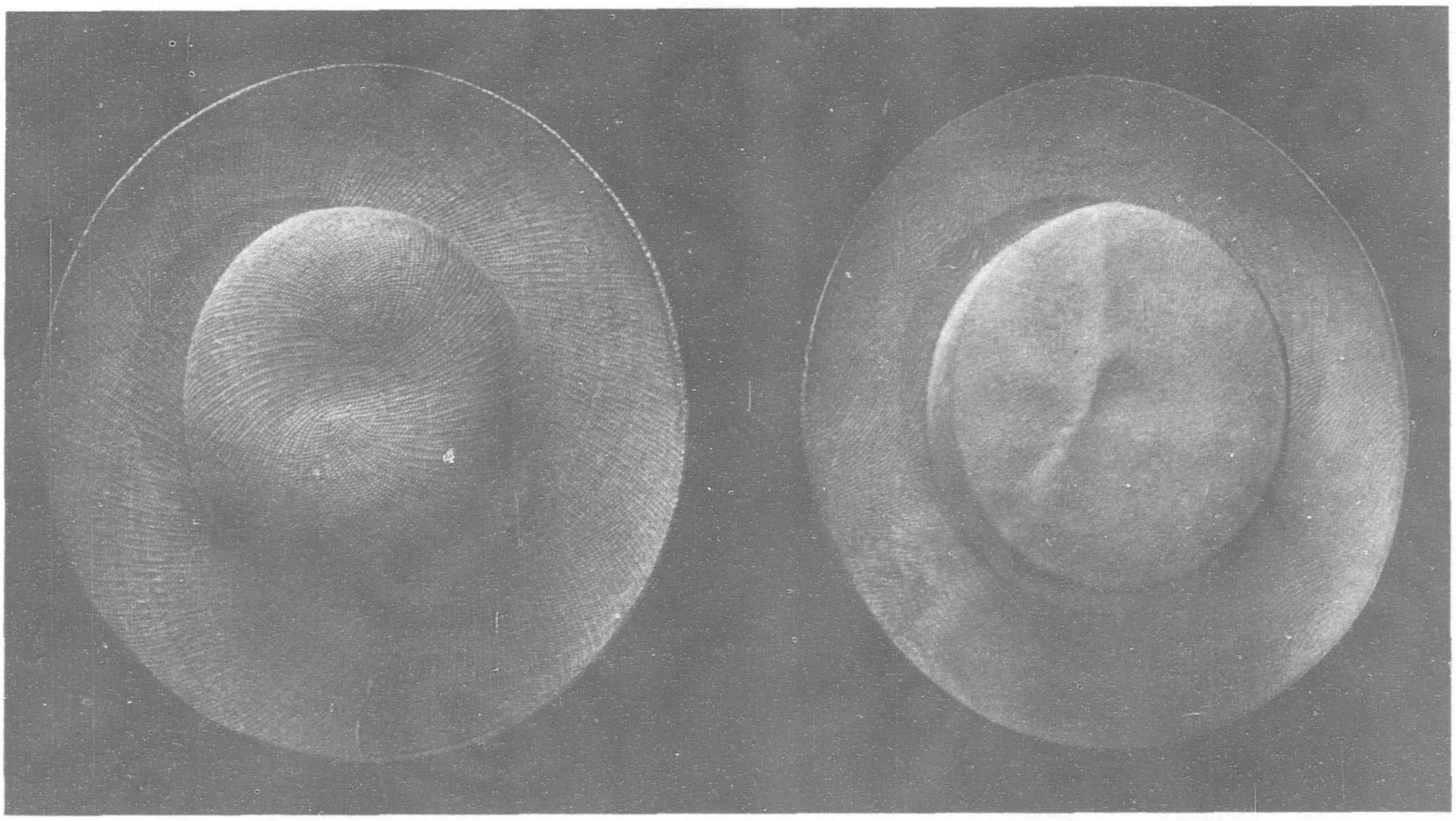
ROLLING BUNTAL STRAW



GRADES OF BAMBOO HATS



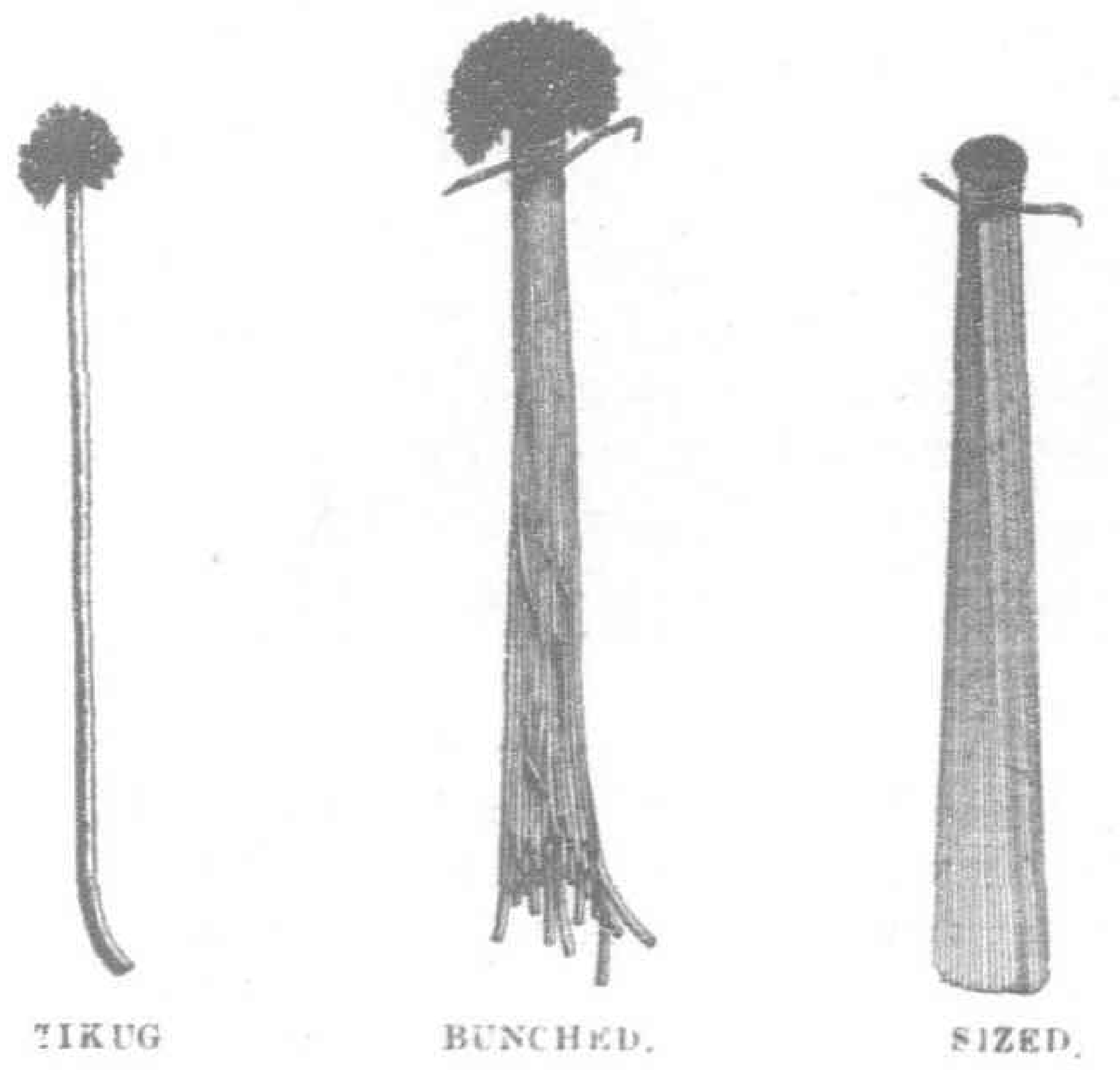
"ARAYAT" AND "MAUBAN" BURI HATS



GRADES OF BUNTAL HATS

Among the hats made from the different parts of the buri-palm is the *buri hat* the straw for which is evolved from the unopened buri leaf. The process is different from the making of bamboo straw. The long leaf buds are cut just before they begin to open and spread in the sun. When dry the leaflets are cut from the midrib and smoothed by pounding them with a wooden maul. The buri is secured by rolling up the leaflets and boiling them in water to which equal parts of vinegar or sour fruits and leaves or alum have been added. After boiling half an hour and then spread in the sun. It is then washed and dried in the sun several times. Buri hats when finished sell from a few centavos for small children's hats to ₱3 for finer grades. The usual variety retails at forty centavos.

The *Kalasiao* or *Pototan* hat is produced from the *midribs* of the *unopened* buri-palm leaf. Mr. Miller describes the process and refers to the hat evolved as "rather more 'nobby' than the bamboo hat" and retails at from ₱2.50 to ₱5 in Manila.



THE PREPARATION OF TIKUG STRAW

The *Buntal* or *Lukban* hat is extracted from the *leaf stem* (petiole) of the *opened buri leaf*. Mr. Miller describes the interesting process of producing the straw and points out that the export demand for the Buntal hat is greater than the supply. He believes that the buri straw industry could be greatly developed by more effective distribution of material from the large central areas now producing the bulk of buri-palm.

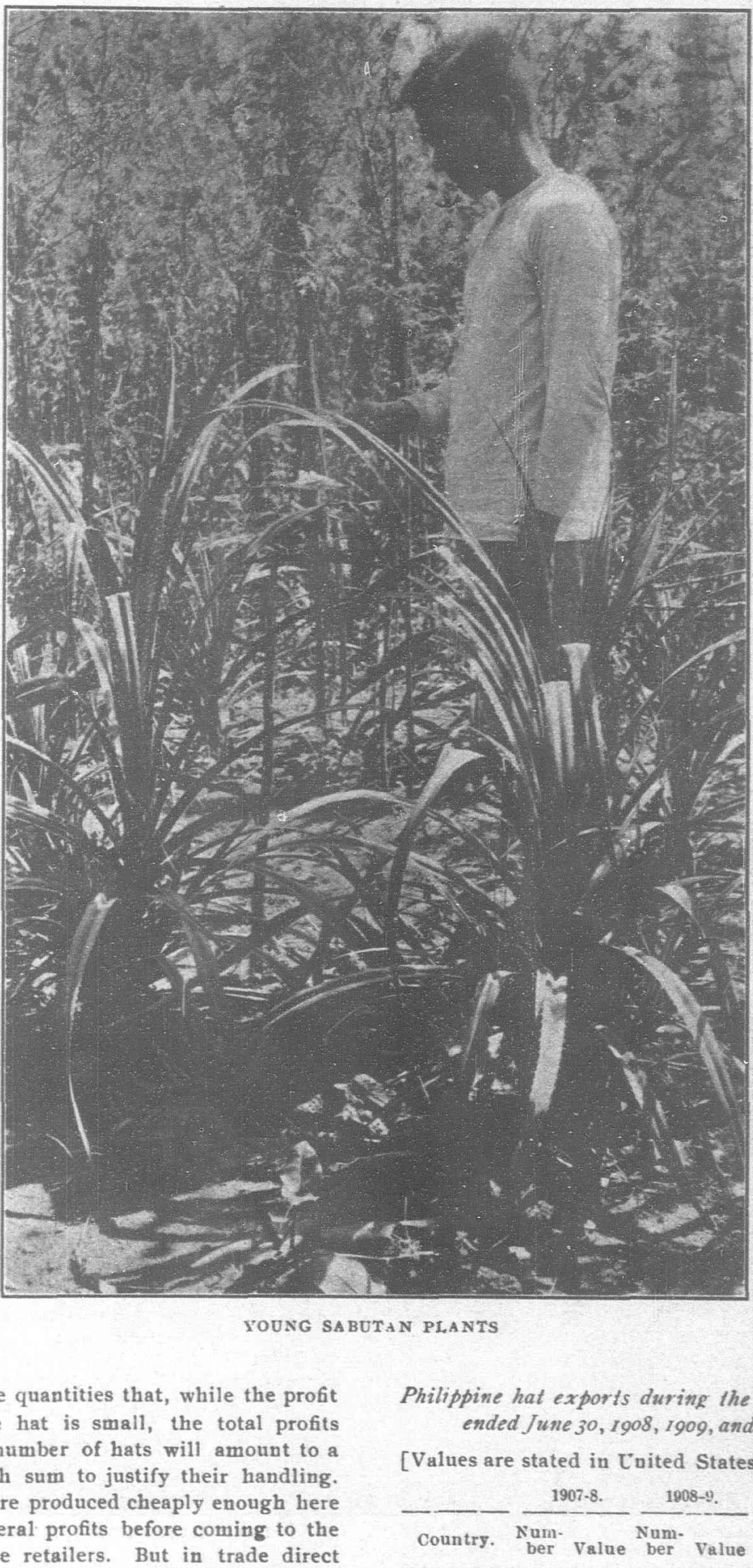
The *pandan straws* used in hat manufacture are produced from about fifty different varieties of the pandan plant, indigenous to every province of the archipelago. There are the pandan and the sabutan hats which are considered the best product of pandan and range in price from 20 centavos to ₱25.

Rattan hats are made from certain species of rattan and are the strongest and best made in the Philippines ranging in price from ₱8 into the hundreds of pesos. Their production is very limited.

The *Tikug hat* is made from the smooth, slender, jointless Tikug grass which grows in low ground. These hats are reported in demand for ladies' wear in Manila and there is some export.

There are a number of other minor hat materials including *nito*, a fern stem from which fine black hats are made but are expensive owing to difficulty in preparing the straw; a vegetable sponge called *patola* is used to sew into hats; rice straw braids are also sewn into hats and a number of other plants and grasses are available for this purpose. Indeed, the supply of material is practically inexhaustible.

The Philippine Hat Trade.—Domestic. Mr. Miller places the buri hat in the lead commercially in domestic trade. "It is cheap, fairly strong, and has a white color such as is demanded by Filipinos." Next in importance, he places the *pandan*, the *Kalasiao* following and the *Sabutan* fourth.



YOUNG SABUTAN PLANTS

Export trade.—Of this trade Mr. Miller says: "The export trade can also be divided into two parts—the export of large lots of hats by wholesalers in Manila to wholesalers in Europe and the United States, and the small trade carried on by smaller dealers in Manila directly with retailers in the United States. Direct export to retailers has been made possible by free trade, and much of it is carried on through the mails. Wholesale export can easily be carried on in those hats, such as bamboo, buntal, and buri, which are produced in such large quantities that, while the profit on a single hat is small, the total profits on a large number of hats will amount to a great enough sum to justify their handling. These hats are produced cheaply enough here to allow several profits before coming to the hands of the retailers. But in trade direct with the retailer hats not produced in such large quantities can be handled, since the total profit on each hat is divided among fewer middlemen and the gain on each hat to the Manila exporter is larger. In the same way hats which are rather expensive from the weaver are also adapted to export trade direct with the retailer, since, not so many profits being obtained, the hat can be delivered to the consumer at a price which he is willing to pay. Besides the wholesale hats, Kalasiao, sabutan, rattan, and buntal-sawali hats are now chiefly adapted to export trade direct to the retailer. Many persons are entering this trade and there are excellent openings for young Filipinos to become not only hat brokers but also exporters direct to the retailers.

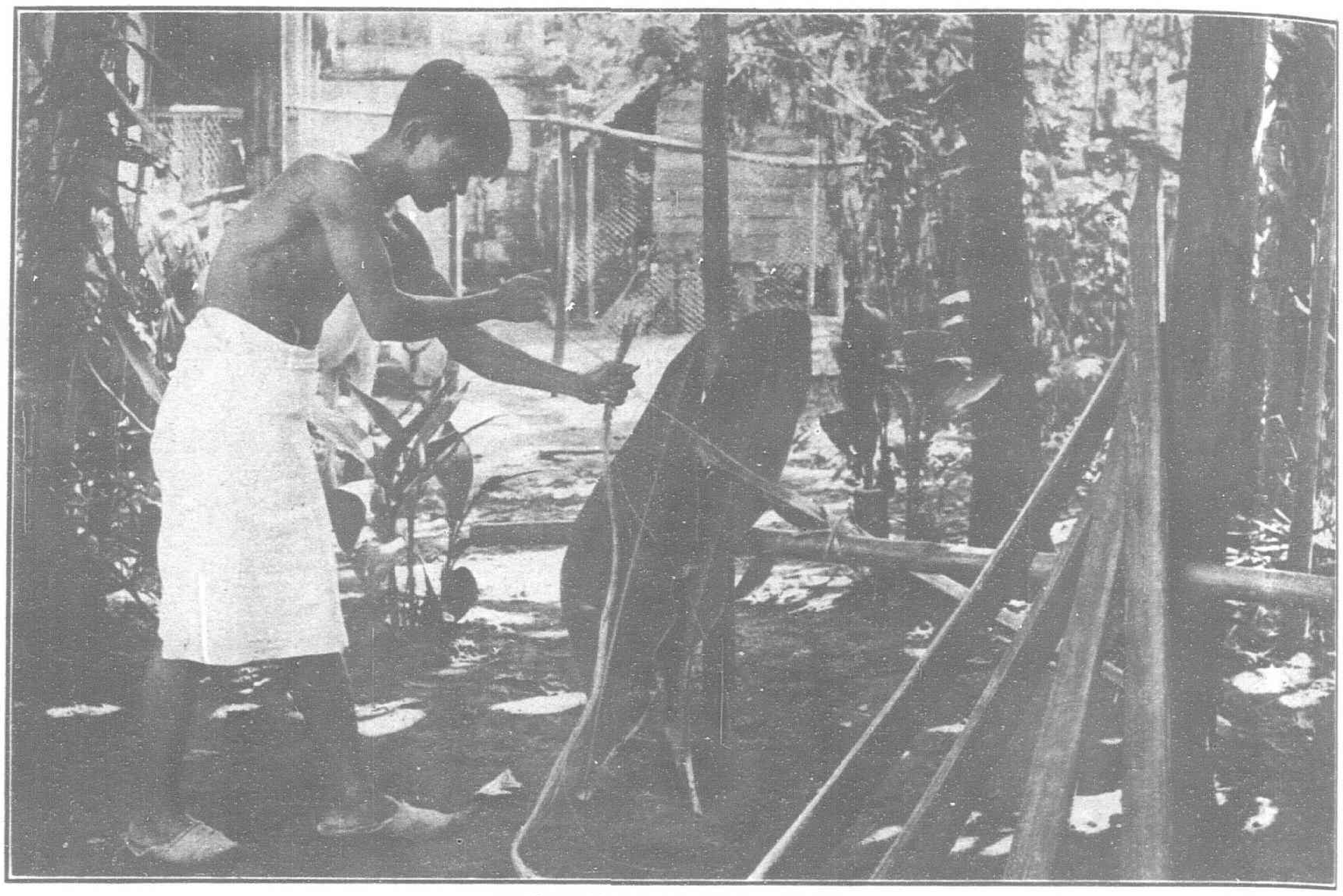
Philippine hat exports during the fiscal years ended June 30, 1908, 1909, and 1910.

[Values are stated in United States currency.]

	1907-8.		1908-9.		1909-10.	
Country.	Number	Value	Number	Value	Number	Value
United States..	63,475	$21,928	32,871	$23,411	189,180	$122,313
France......	211,567	88,856	289,167	83,108	289,167	124,154
All other countries.	197,345	59,103	210,957	61,963	143,028	33,882
Grand total....	472,387	169,887	482,995	168,482	621,375	280,349

"The export of Philippine hats as reported to the Insular Collector of Customs by exporters shows only three headings—namely, bamboo, buri, and all other. Most of the buntal hats and many of the buri are undoubtedly reported under bamboo hats, hence it is impossible to determine the relative amounts of the chief export hats of the Philippines sent abroad. The statistics are, however, valuable for the purpose of determining the increase in the trade and the relative amounts taken by different countries. Previous to free trade very few hats were sent directly to the United States, most of them going via Paris. In the year 1909-10, however, the trade direct to the United States increased more than five times over the same trade in the year 1908-9, thus accounting very largely for the total increase in hat trade of the Philippines, which in the year 1909-10 rose to over 70 per cent more than the trade of 1908-9. France, it will be noted, continues to be the chief taker of Philippine hats, though there seems to be a good chance that the United States will outdistance her in the records of the present year. It will be noted that the average price of hats exported to the United States is about ₱1.30, while the average price of those exported to France is about 86 centavos, indicating that the United States is at present the best market for the finer hats. Exporters seem to differ in opinion as to whether Europe or the United States will in the future be the best fine-hat market, but these statistics would seem to indicate that the largest demand will come from America. The fact should be noticed also that the average price of hats exported in 1908-9 was about 70 centavos, while the average price in the year 1909-10 was about 90 centavos, seemingly indicating either larger export of finer hats or a rise in prices.

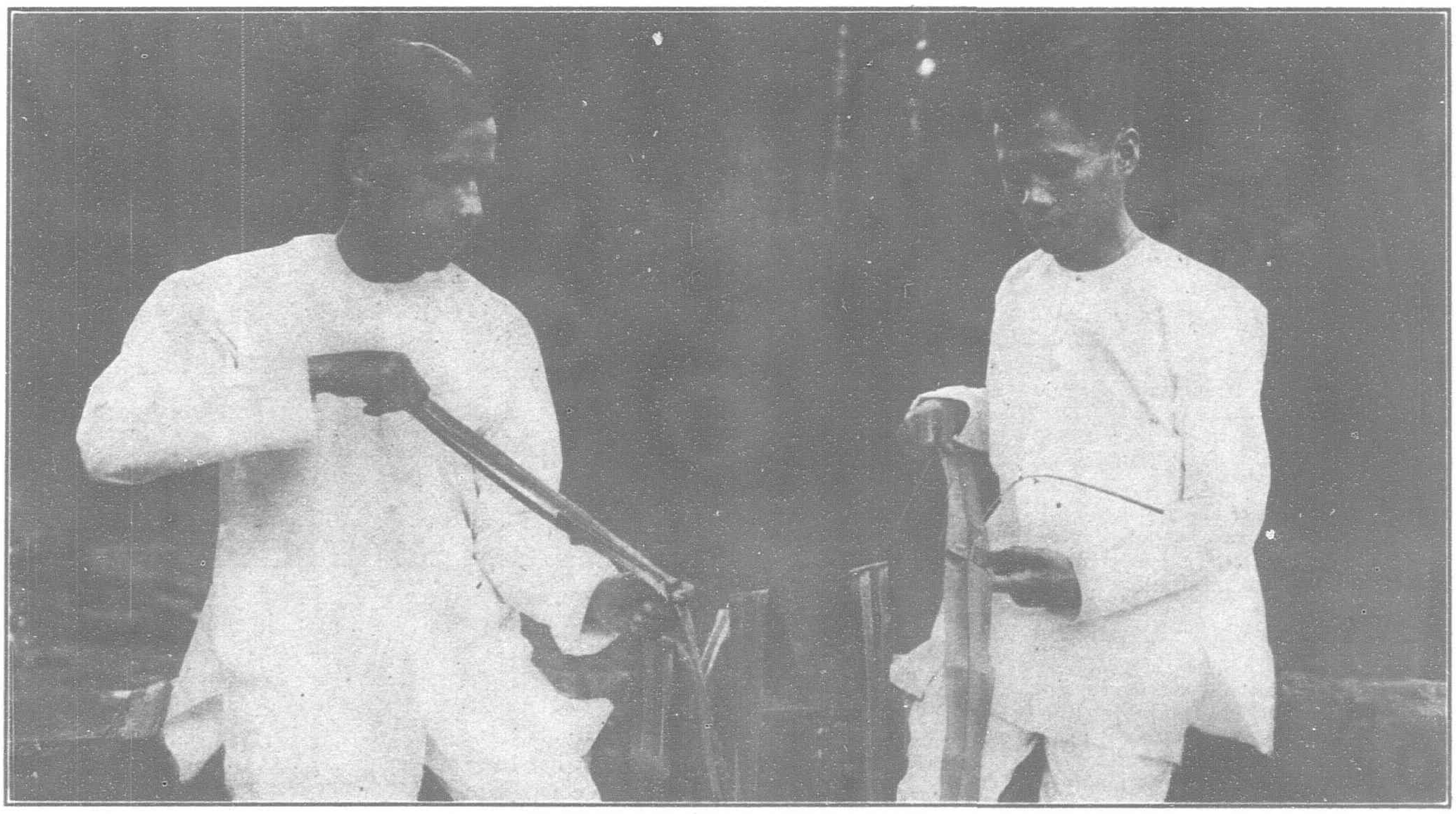
"Bamboo and buntal hats are the largest export in point of value. While many thousands of buri hats were exported, their total value is very small in comparison with the other two, and they largely account for the small export price per hat. A small number of Kalasiao, rattan, and other hats is also included, but they are insignificant compared with bamboo and buntal. In fact, according to the opinion of most persons, particularly exporters interested in the hat busines, bamboo and buntal hats will continue the chief hat export of the Philippines, with buntal growing steadily in relative importance. The demand for bamboo hats is liable to fluctuate, since they are more of a fancy article than are buntal and, being more used for women's wear, are more influenced by everchanging fashions.



EXTRACTING BUNTAL FIBER

Summary.—It is the consensus of opinion among hat exporters and other persons largely interested in Philippine hats that the buntal hat is, of the different Philippine products, the hat to be encouraged in manufacture for export. The demand for it is greater than the present supply, and seems to be increasing. Present production could be increased manyfold without serious decrease in the price. But not only should the production be stimulated in amount but the quality of the hats should also be improved so that by better weaving more of the finer-grade hats shall be produced. The raw material for the production of buntal straw exists in large quantities, and the straw can easily be distributed to the producing towns. It would seem a good policy, there fore, toencourage the production of this hat not only in towns where no commercial hat production now exists, but also in towns where less salable hats are now made. Buntal-sawali has large possibilities, and the hat may become important in both domestic and foreign trade.

"While sabutan does not have the export importance before it that buntal has, yet its great value in domestic trade and its possible importance in export trade direct to the retailer make it a hat the production of which should be encouraged and which may some time be the foremost hat produced in the Islands. Since the plant can be grown in the school grounds and the straw is easily



PREPARATIO NOF SABUTAN STRAW

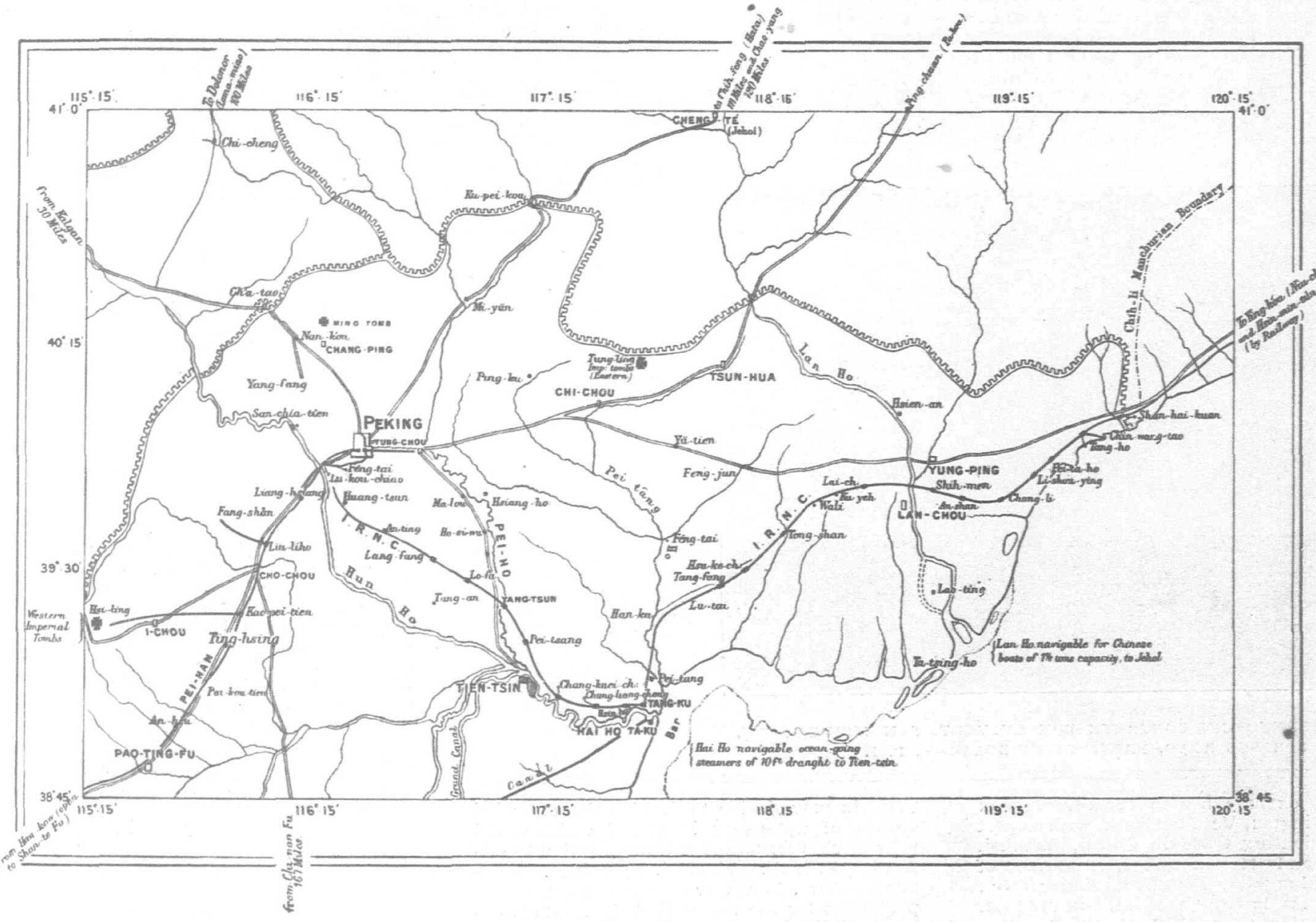
THE TRADE OF TIENTSIN

Trade reports for the year 1909 show an increase both in exports and imports over the previous year but more marked in the latter. Foreign imports aggregated Hk. Tls. 48,332,463, as against Tls. 39,062,456 in 1908, an increase of Tls. 9,270,000; native imports, Tls. 29,100,000, as against Tls. 26,000,000, an increase of Tls. 3,000,000. Exports for 1909 aggregated Tls. 31,089,081, an increase of approximately Tls. 10,000,000. The total aggregate of trade was approximately Tls. 22,000,000 greater than in 1908 and Tls. 5,500,000 over the year 1907. Compared with 1907 there is a falling off of foreign import trade to the value of Tls. 16,000,000 and an increase in native importations of approximately Tls. 10,000,000, while the export trade has increased during the two years by Tls. 12,500,000. The above figures would indicate a recovery from the foreign trade depression which marked the year 1908 and prospect for a return to its former brisk condition. The status of the Chinese merchants' indebtedness to foreign firms and the accumulation of debased silver in the banks have been largely responsible for the disturbance of this market, but a solution to both these problems has been reached and the year 1910 gives evidence of more activity. Noted in the returns was marked evidence during the year of a disposition to purchase in Shanghai in preference to buying direct from the country of origin. This was especially noted in the grey and white shirtings of British and American manufacture and especially of the latter. Japanese shirtings were imported direct. Import of American shirtings and drills was double that of the previous year and British and American sheetings show a slight increase, the Japanese sheetings being more than double that of the previous year. English grey sheetings and white shirtings showed a marked increase. Printed cotton demand declined and Indian and Japanese cotton yard yarns showed a marked increase.

The Export Trade.—It will be seen that this trade is increasing very rapidly and gives promise of continued expansion. Tientsin is still recognized as the great northern port of China. It is not only the gateway to the capital, but the outlet for the trade of the vast territories of Mongolia and north western China. Its only drawback is the fact that it is icebound for approximately four months in the year. During these months it is not improbable that the advantages of the port of Ch'in-wang Tao as an ice free port will appeal more and more to Tientsin importers. This port is the result of the enterprise of the Chinese Engineering Mining Company, the output of whose mines forms a large part of the present export. This desirable port has been referred to as the probable rival of Tientsin, but so far, instead of proving an injury, it has proved a benefit. With the development of the railways tapping the northern and western territories and the advantages of an ice free port at Ch'in-wang Tao, the disposition to make the ice free port the distributing center for imports and the outlet for the products of that large territory now served by Tientsin may in time appeal very strongly to the merchants.

Tientsin will be obliged to make especial effort to keep pace with the rapid development of new lines of railways especially

Compiled in Intelligence Branch North China Command, December 1903.



MAP SHOWING TERRITORY SERVED BY TIENTSIN

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prepared, the raw material for hats need cost nothing. Other straws, such as buri, are often difficult to obtain.

"The present production of bamboo hats seems about to meet the demand in the long run, a proposition which is even more true of Kalasiao hats, and it is therefore doubtful whether their increased production should be encouraged. The natural spread of these two industries will most likely meet any growth in the demand for their products.

"Buri and pandan hats are of large importance in the domestic trade and will most likely continue to be. Their production should be encouraged to meet home demand and also to meet a smaller demand in the export trade.

"Some of the minor hats, such as tikug, may prove of great importance with time, and their production should be fostered in present producing regions and where raw material can be obtained.

"As to the manner in which hat weaving should be taught in the schools, it would appear that the fabrication of buri hats should be taught first, since the straw is easy to manipulate in the 'over-and-under' weave. Pandan and tikug are in the next class in this respect. This instruction should be followed by the weaving of buntal hats in the "over-and-under" weave, which is often found difficult at first; then sabutan, with double straws, in the "sawali" weave; and finally, buntal, in the "sawali" weave. Thus students will be taught the weaves and the manipulation of the straw from the most simple and easiest weave and most pliable straw to the most difficult weave and stiffest material. While there are distinct markets for fine and coarse hats, fine and careful weaving only should be encouraged, since, on account of the novices and aged weavers, the production of coarse hats will take care of itself."

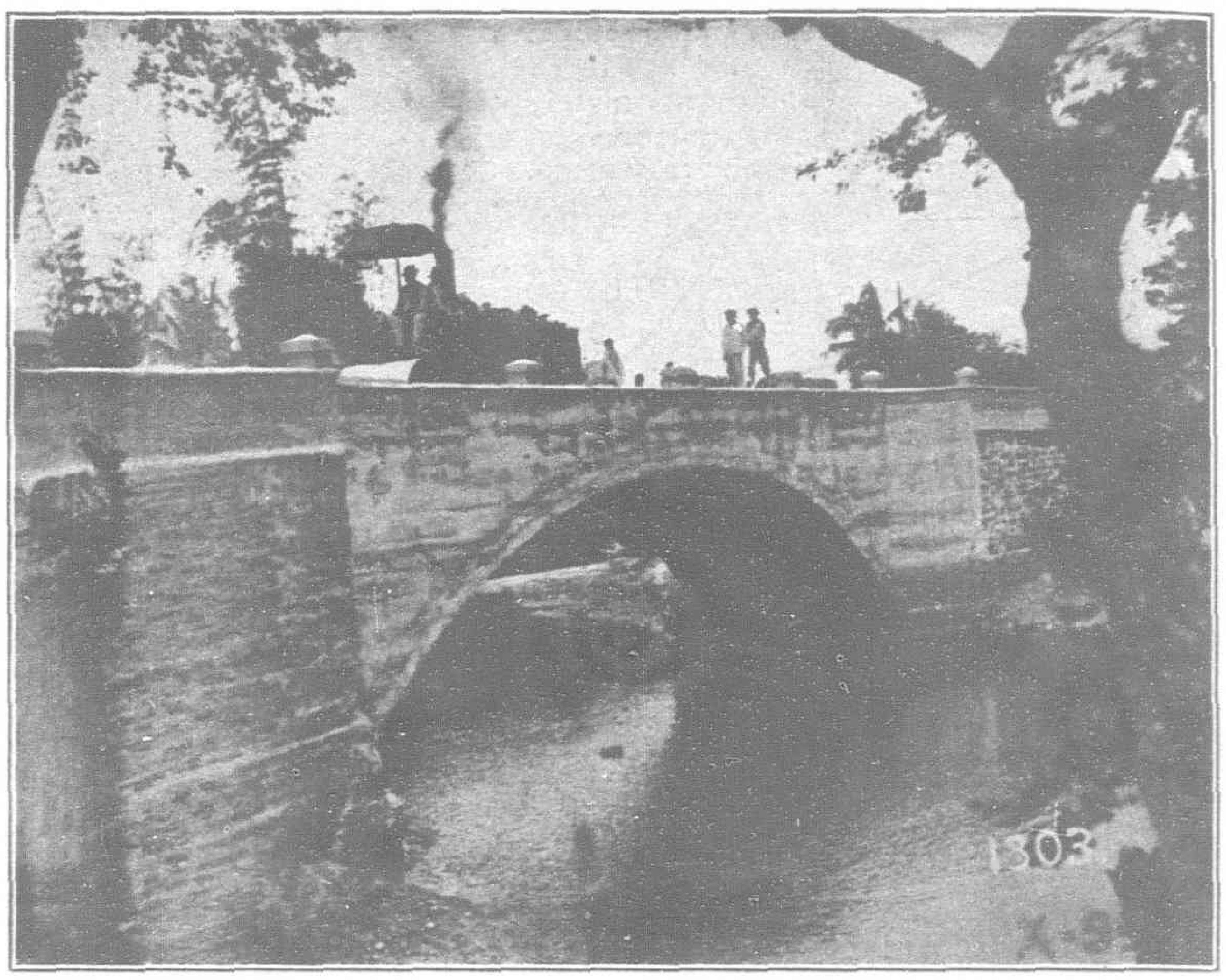
PHILIPPINE PUBLIC WORKS

The annual report of the Hon. Charles B. Elliott, Secretary of Commerce and Police, Philippine Islands, for the fiscal year ended June 30, 1910, shows a total expenditure by the Bureau of Public Works of ₱7,500,000, covering the construction of 363 kilometers of first class roads, providing caminero maintenance for 914.5 kilometers besides caring for 2,000 kilometers of second class roads. The bridge construction included 500 structures and a large number of pipe culverts. Of the total amount expended ₱6,000,000 covered the cost of the road construction and maintenance.

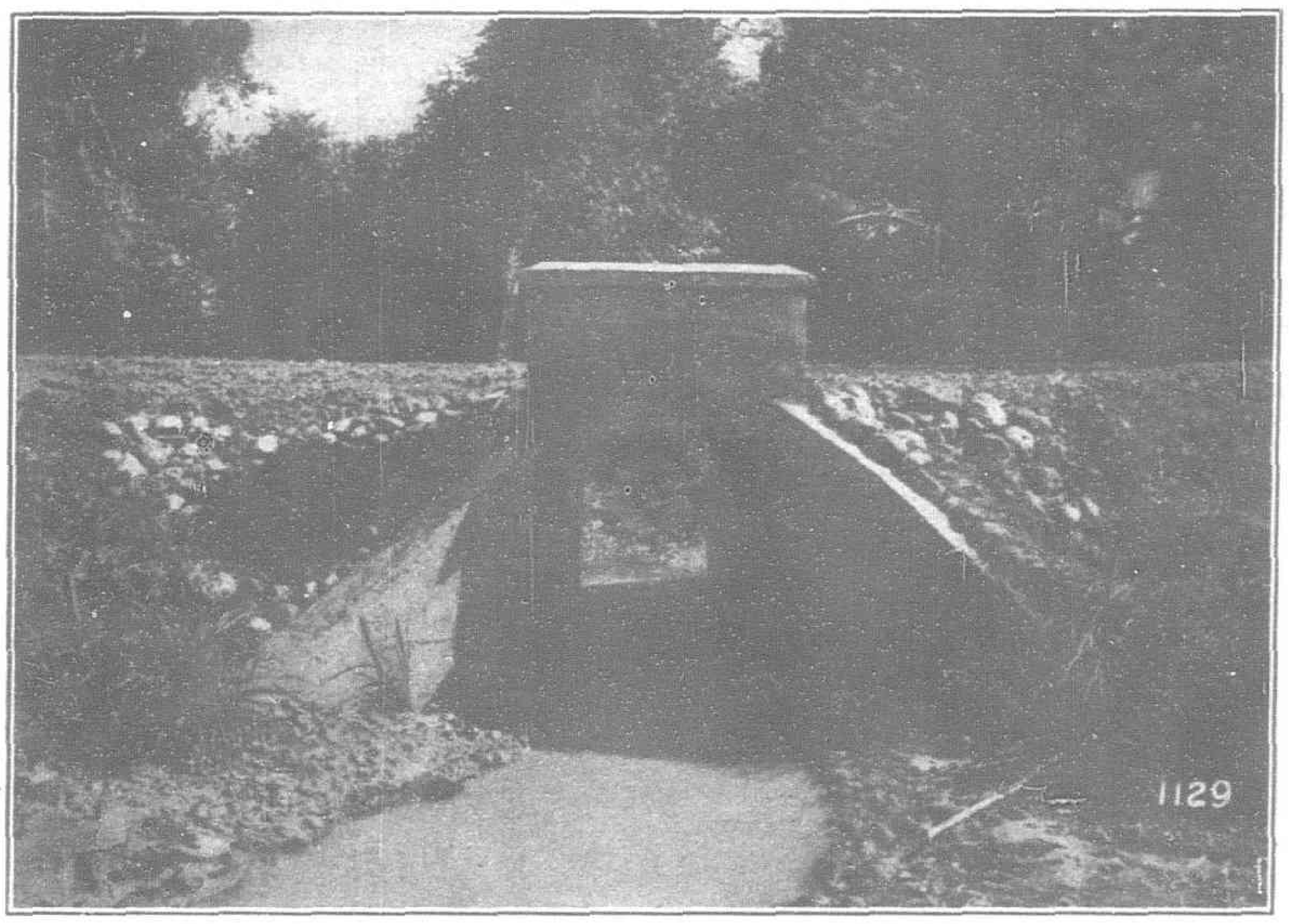
Legislation During the Year.—Besides the appropriation of ₱1,500,000 for general road and bridge work, ₱300,000 were added for the construction of interprovincial roads for the purpose of connecting up the many provincial thoroughfares and unify a road system through the islands.

Unit Cost Accounting System.—This system was introduced in the statistical division and extended to cover 75 important road and bridge construction projects making about 1,100 kilometers of road upon which the caminero system is in force and it is proposed to extend it to cover every department of activity of the bureau. This will include the valuation and revaluation of important roads and bridges and other property. As an instance of the result of the work up to date, there were 1110 kilometers at original valuation and 714 kilometers revalued during the year bringing the total taken under consideration, ₱8,783,600, while the bridge valuation including 2,821 bridges and culverts with a length of 12,584 meters amounted to ₱3,531,000 or a grand total revaluation of ₱12,314,600.

The Provincial Division.—The activity of this important division is demonstrated by the increased construction compared with all previous years. For instance in the development of first class road construction there were 395 kilometers completed prior to June 30, 1908. At the end of the fiscal year 1909 the total had reached 551 kilometers, while at the end of the fiscal year 1910 the total reached 914.57 kilometers, an increase of 199 kilometers over the previous year.



MANDALAGAN BRIDGE, PROVINCE OF OCCIDENTAL NEGROS, P. I.
(Clear span, 18 meters. Reenforced concrete, using old Spanish adobe stone retaining walls)



TYPE OF REENFORCED-CONCRETE BOX CULVERT, SAN MIGUEL-SIBUL SPRINGS ROAD, PROVINCE OF BULACAN, P. I.

Division of Engineering Design.—During the year this division prepared designs and detail plans with estimates covering 15 steel bridges having a total length of 479 meters and an estimated cost of ₱430,000; 18 wooden structures, total length 848 meters, cost ₱149,300 and plans for 82 reinforced concrete bridges having a total length of 2,311 meters and an estimated cost of ₱1,097,850. Besides, bids were advertised for 60 structures and the division inspected over 110,000 kilos of structural steel. There are under construction 69 bridges and bids are being advertised for, almost every week, covering new projects.

Road Prizes.—The awarding of prizes among the provinces has resulted in increased interest in the maintenance of the provincial roads. The result of the competition for the year was an award of ₱10,000 to the province of Pangasinan for the best maintained and most complete system of first class roads and the reward of ₱10,000 for the greatest provincial expenditure for roads and bridges proportionate to the entire revenue went to the province of Laguna and the prize of ₱10,000 for the best kept second class system of roads was divided equally between Ilocos Norte and Ilocos Sur.

The ₱5,000 provided for prizes for the individual camineros has not yet been distributed, but there has been keen competition and a marked improvement on the roads under this system.

Building Construction.—The total number of projects for which plans were designed was 157 with an estimated cost of ₱7,310,459, of which number, according to the report of the Consulting Architect, 33, costing ₱2,029,295, were brought to completion and 56 projects costing ₱1,694,664 are now in course of construction, while plans are being prepared or considered to cover 68 projects repre-

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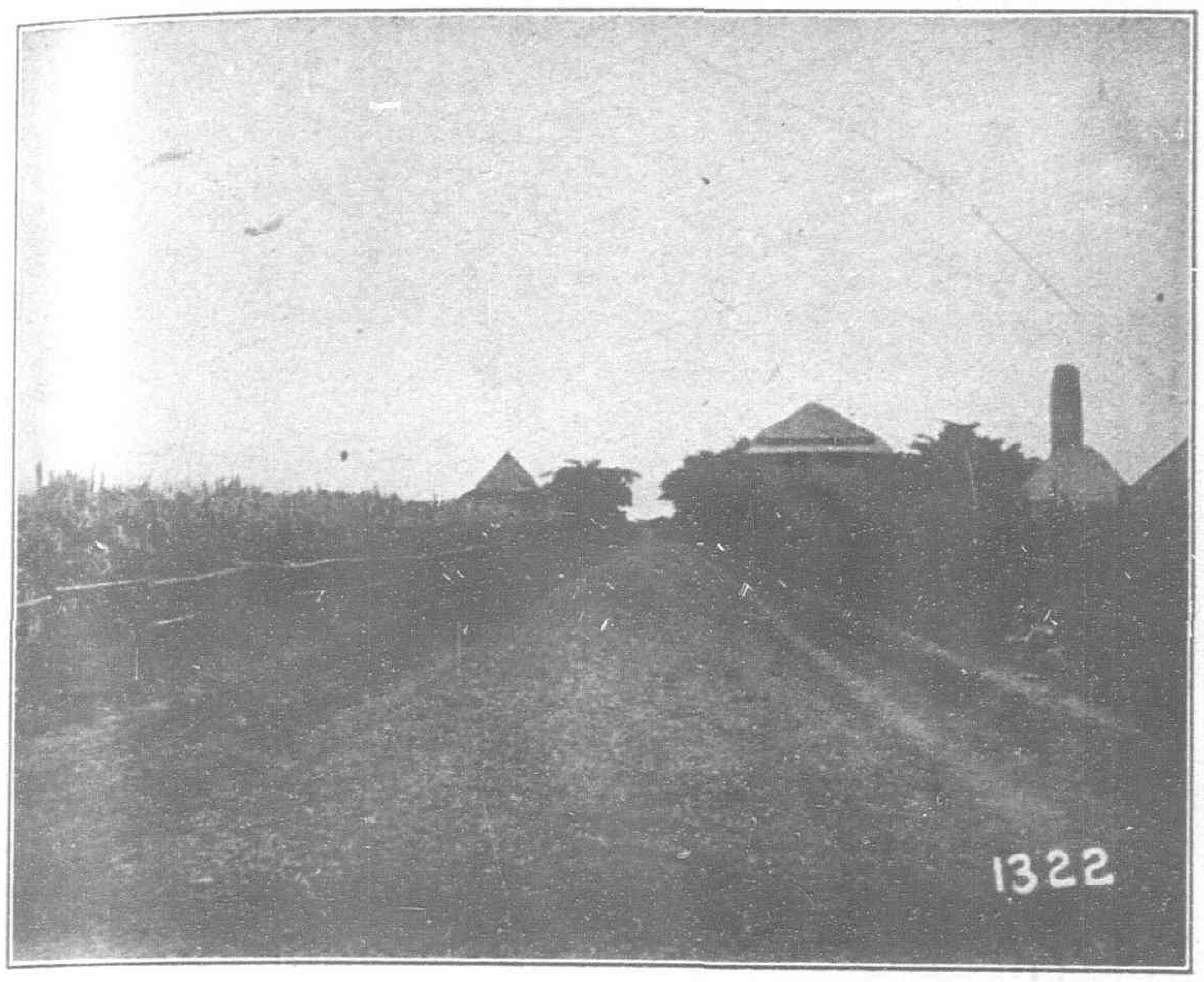
designed to exclude her to the advantage of Hankow, Tsingtau, Verkneudinsk, with respect to her distributing trade in Chihli, Shanhsi, Shangtung and Honan and her source of supply in Mongolia, Fengtien, Kansu, etc., which she has largely controlled in the past.

The battle is now on between the Russians and the Chinese with regard to the trade of Mongolia, especially the Northern section in gold, furs and skins. The Peking-Kalgan Railway with its proposed extensions may save much of this trade unless it is diverted the other centers by more convenient markets. Hankow is making every effort to capture the Honan and tributary trade, while Tsingtau is in a fair way to secure her share of Shangtung trade through the German railways. The K'aifeng-Hsian line with its extension to Lan-chou would tend to carry the wool trade of Shanhsi to Hankow. The Chengting-T'aiyuan railway, however, may save a large portion of this trade to Tientsin.

At the same time Tientsin is becoming a large railway center and will have an advantage as a distributing center over Hankow and, indeed, any of her immediate rivals provided the merchants of Tientsin take the precaution to guard against traffic combinations on the part of her rivals.

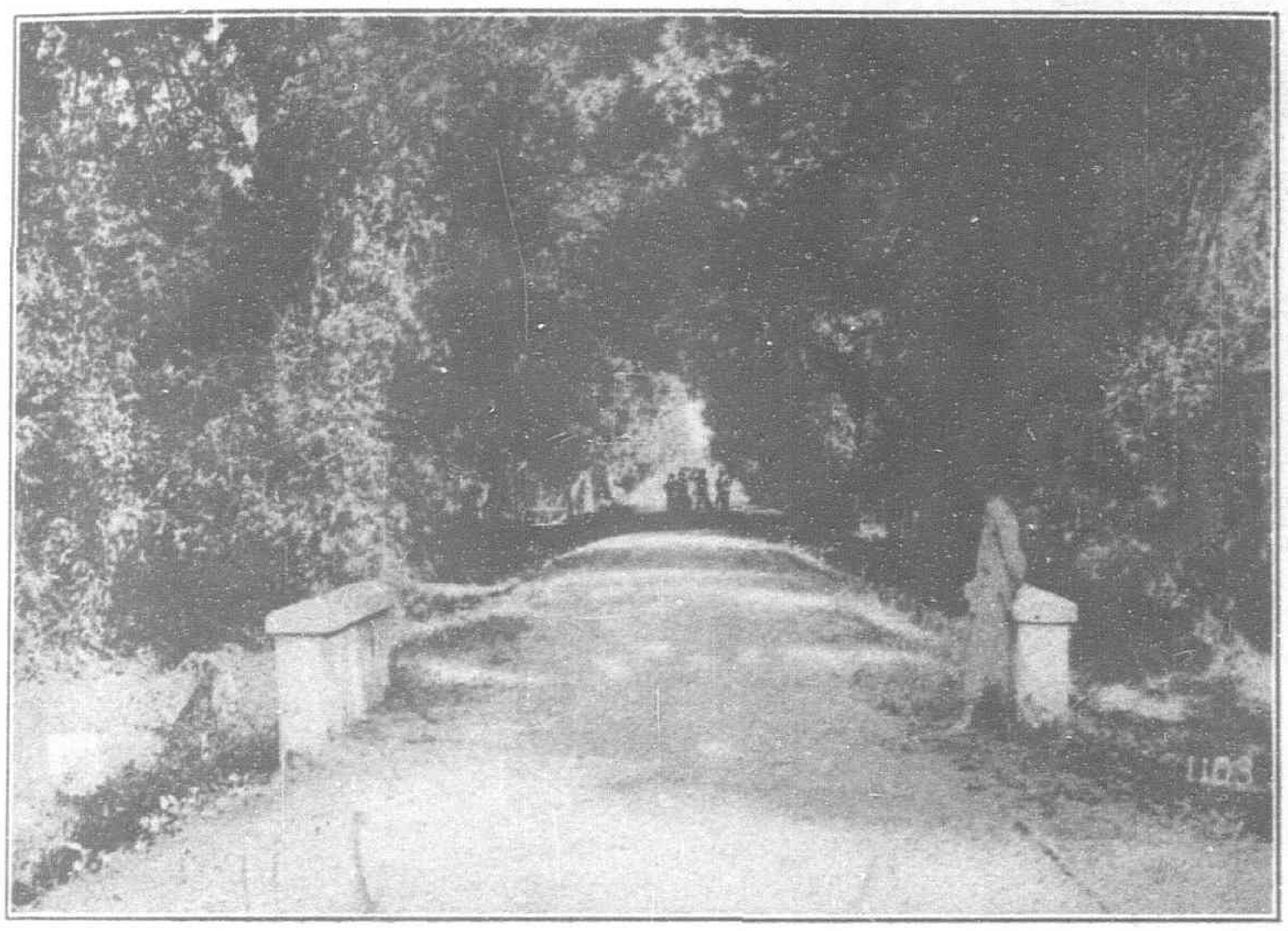
As an offset to the probability of railway development interfering with her prosperity Tientsin may decide to develop the extended system of waterways in Chihli which would provide cheaper means of transportation to different points throughout that province. Tientsin's future, however, may not be considered precarious for the reason that she must always be recognized as the gateway to the capital and receive more assistance and consideration from the Imperial Government than would otherwise be her portion. Then it must be recognized that as the country is opened up by modern railway systems the increased productiveness followed by the establishment of the many different industries throughout the country the trade maps must be revised and the zones of activity relocated. It is only by keeping in close touch with these changes in the development of trade in China that Tientsin or any other trade center may hope to hold its own.

The next decade will probably decide many questions relative to China's future, but no feature involved will prove more absorbing than the keen competition among the leading commercial centers for supremacy in trade, involving the economic distribution of goods throughout the empire and the direction of the movement of products for export through the most attractive avenues to the more favorable markets. In all this Tientsin should secure her share.



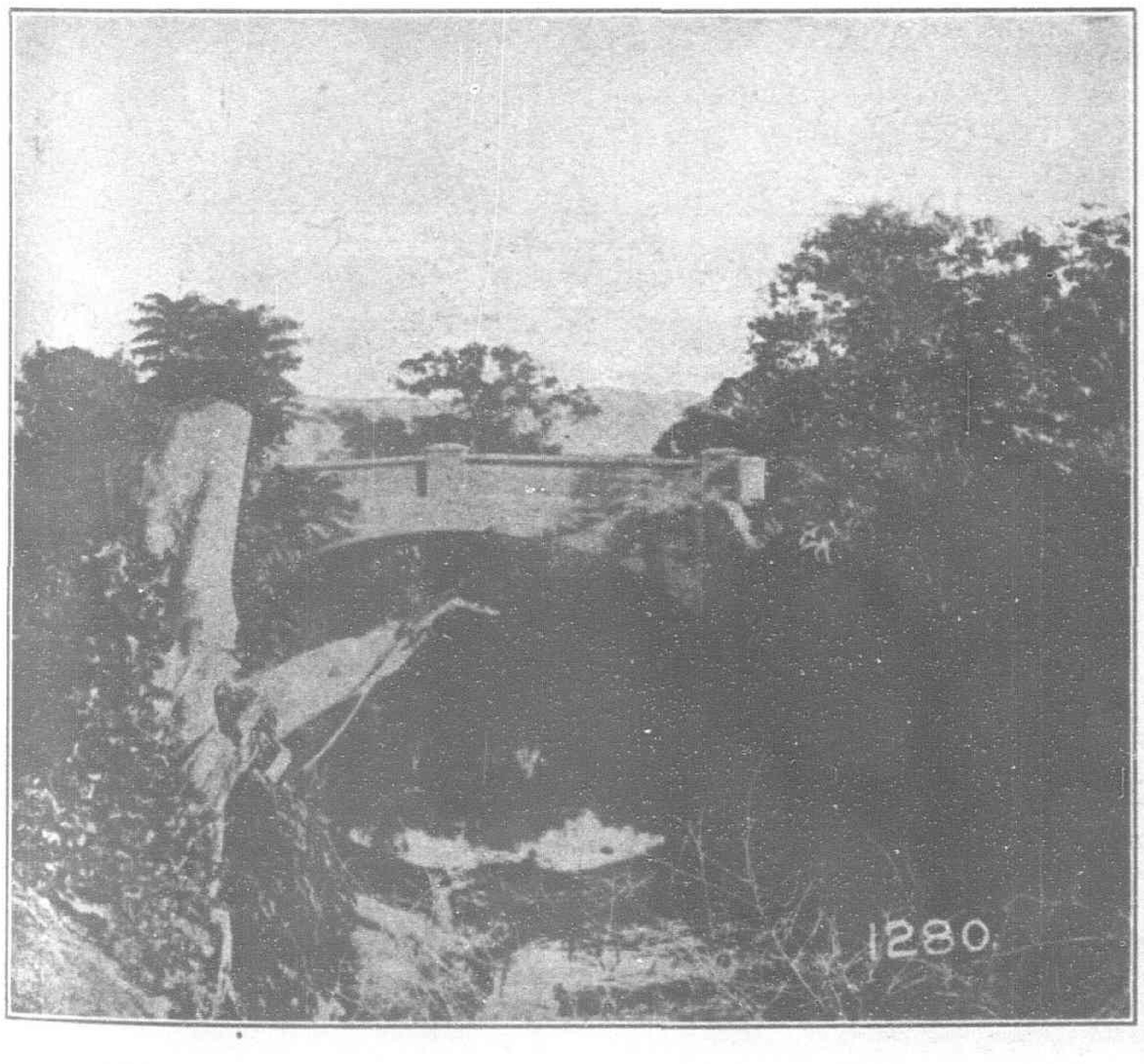
JARO-ZARRAGA ROAD, PROVINCE OF ILOILO, P. I., SHOWING SECTION OF COMPLETED ROADBED OF SAND-CLAY FOUNDATION WITH 10 CENTIMETERS OF FINE RIVER GRAVEL SURFACING

BREAKING ROCK BY HAND ON THE TABACO-LIGAO ROAD, PROVINCE OF ALBAY, P. I., INAUGURATED TO RELIEVE DISTRESS CAUSED BY LOW PRICE OF HEMP IN THAT PROVINCE



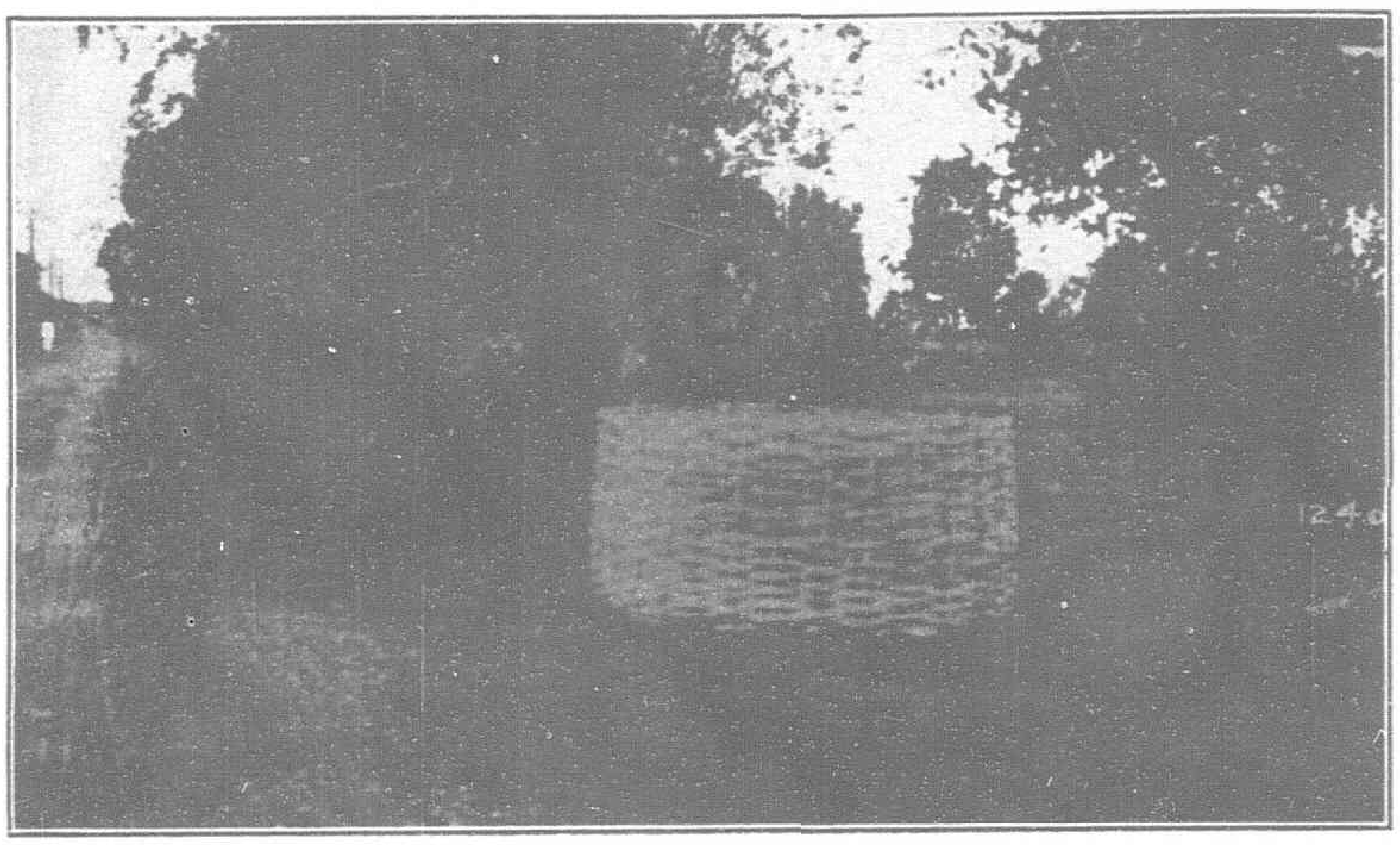
SAN MIGUEL-SIBUL SPRINGS ROAD, PROVINCE OF BULACAN, P. I., COMPLETED ROADWAY

SAN MIGUEL-SIBUL SPRINGS ROAD, PROVINCE OF BULACAN, P. I., COMPLETED ROADWAY



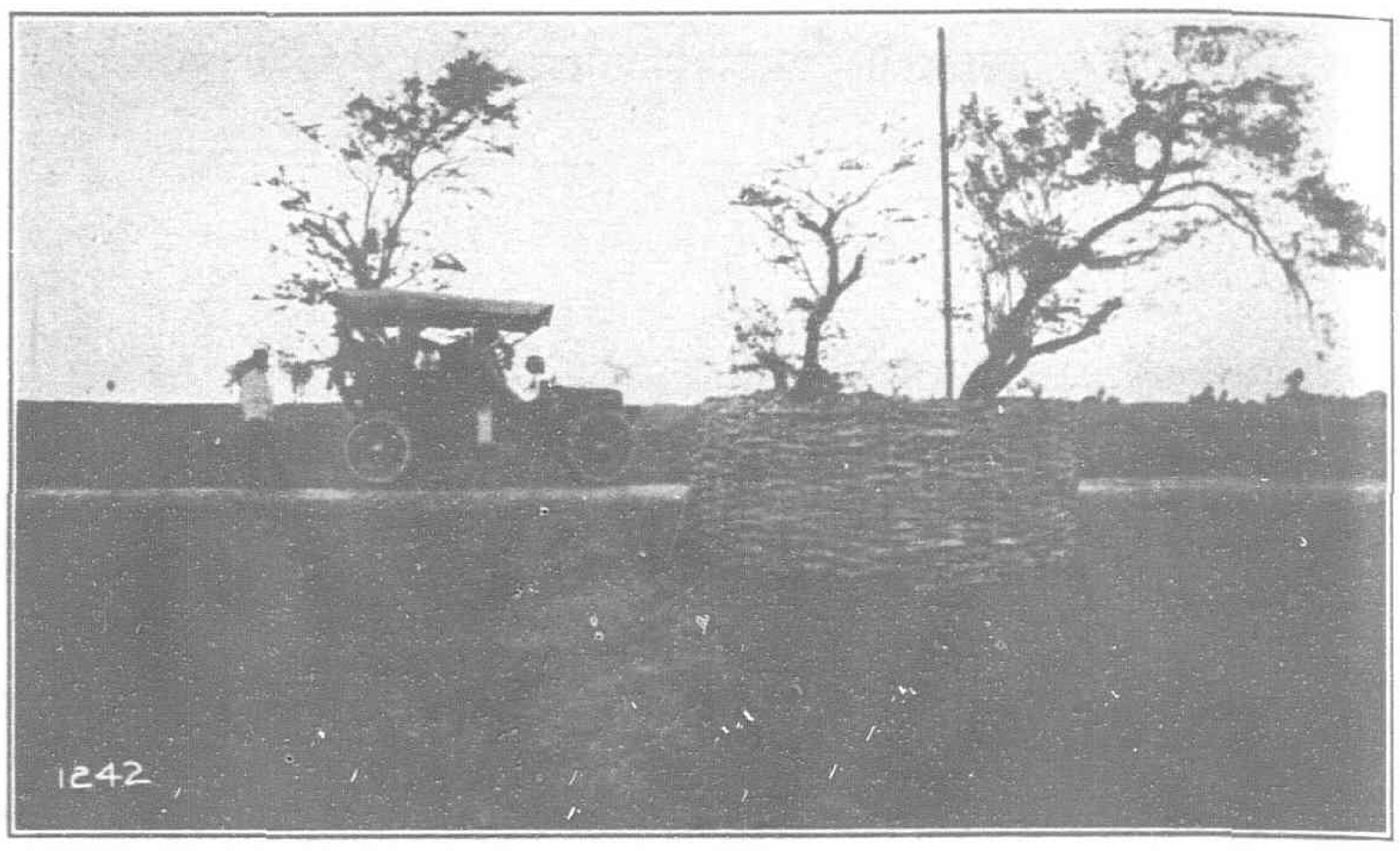
PALAMPAS BRIDGE, PROVINCE OF OCCIDENTAL NEGROS, P. I.
(Reenforced concrete, span of 13.7 meters. Contract price, ₱2,726.)

IRIGA-BUHI ROAD, PROVINCE OF ALBAY, P. I., SHOWING COMPLETED MACADAM COURSE

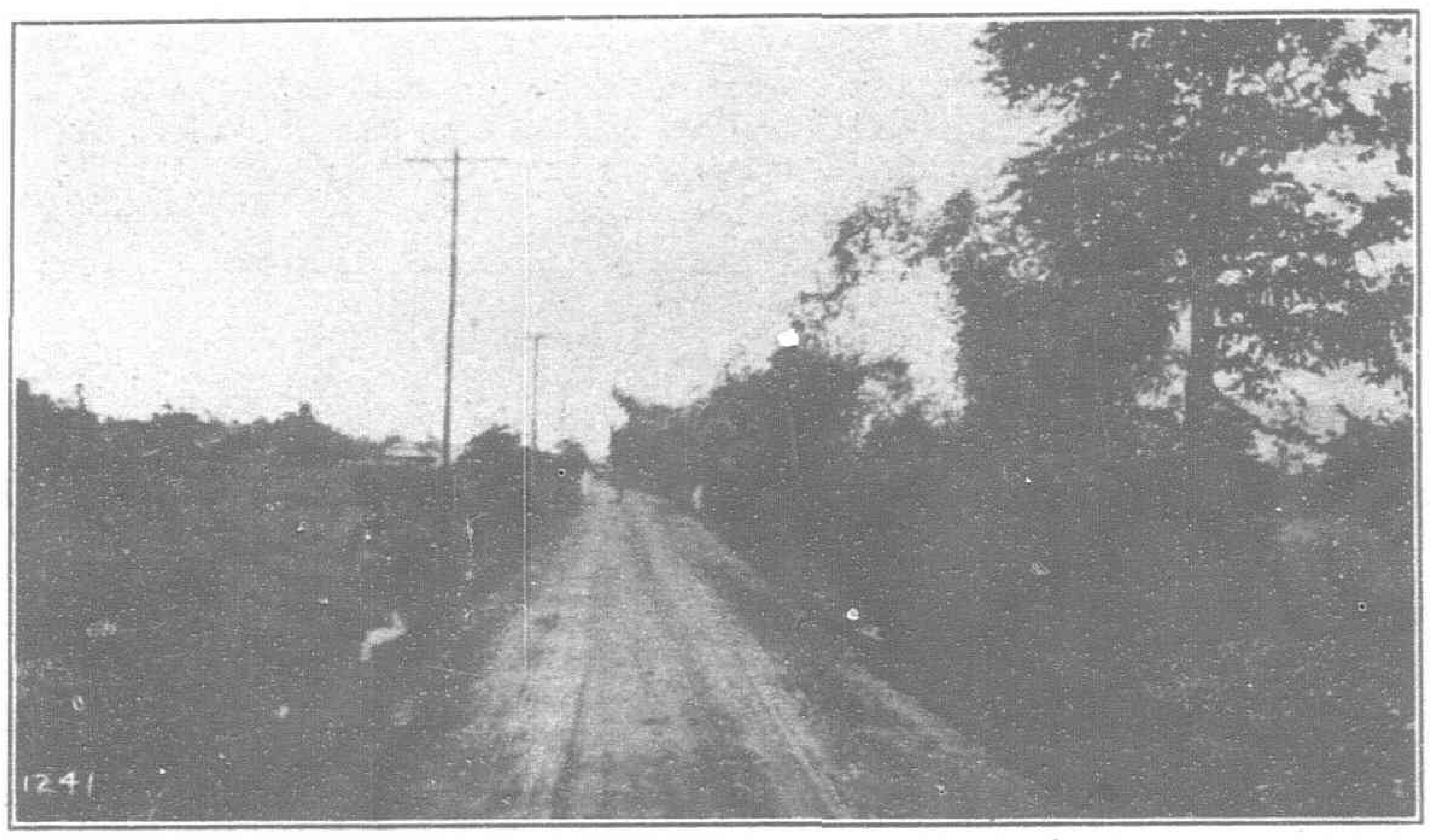


PASAY-ZAPOTE BRIDGE ROAD, PROVINCE OF RIZAL, P. I., SHOWING BAMBOO MAINTENANCE DEPOSITORY FOR SURFACING AND REPAIR MATERIAL FOR USE OF CAMINEROS

(Capacity, 10 cubic meters)



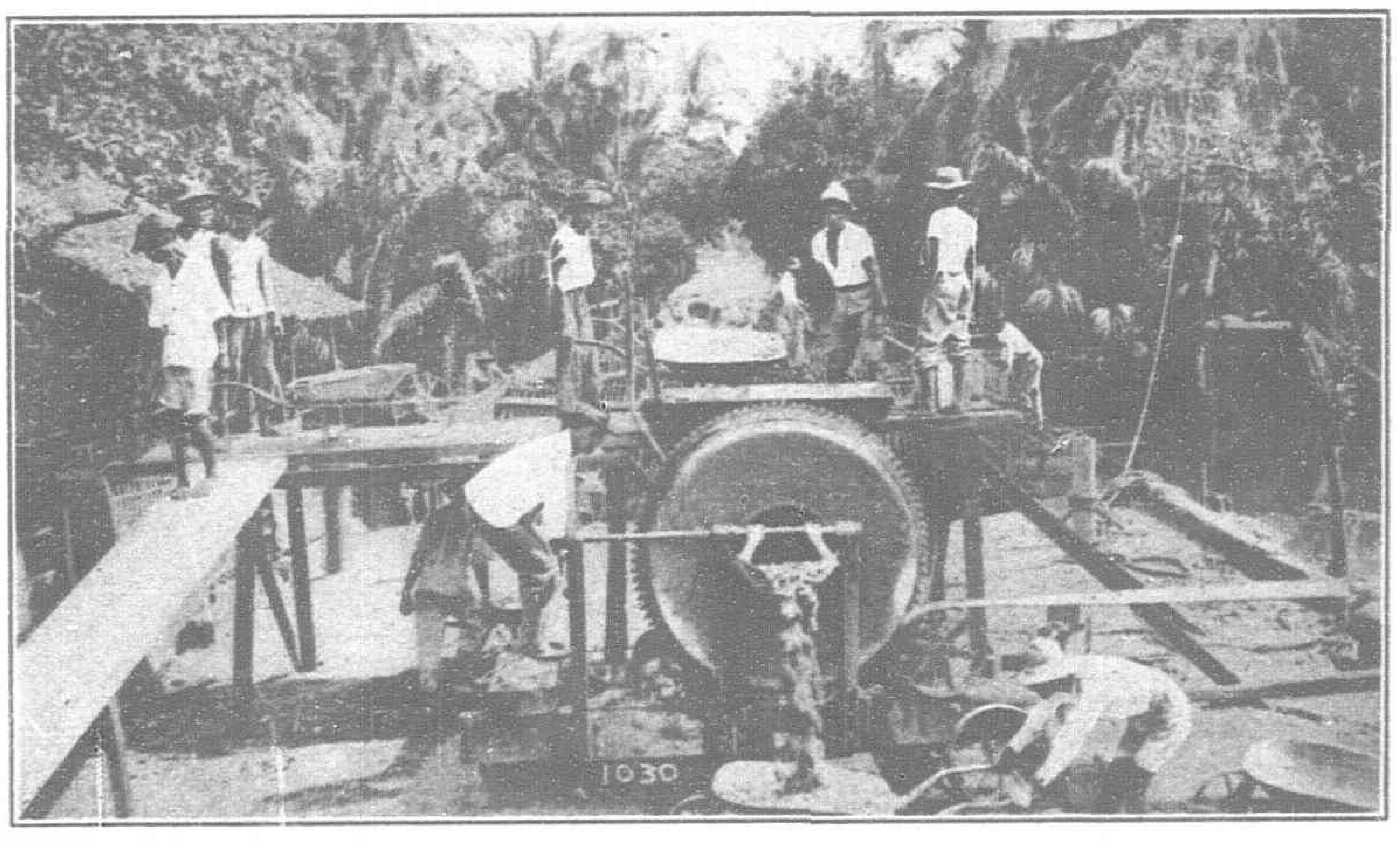
PASAY-ZAPOTE BRIDGE ROAD, PROVINCE OF RIZAL, P. I., SHOWING BAMBOO MAINTENANCE DEPOSITORY FOR SURFACING AND REPAIR MATERIAL FOR USE OF CAMINEROS



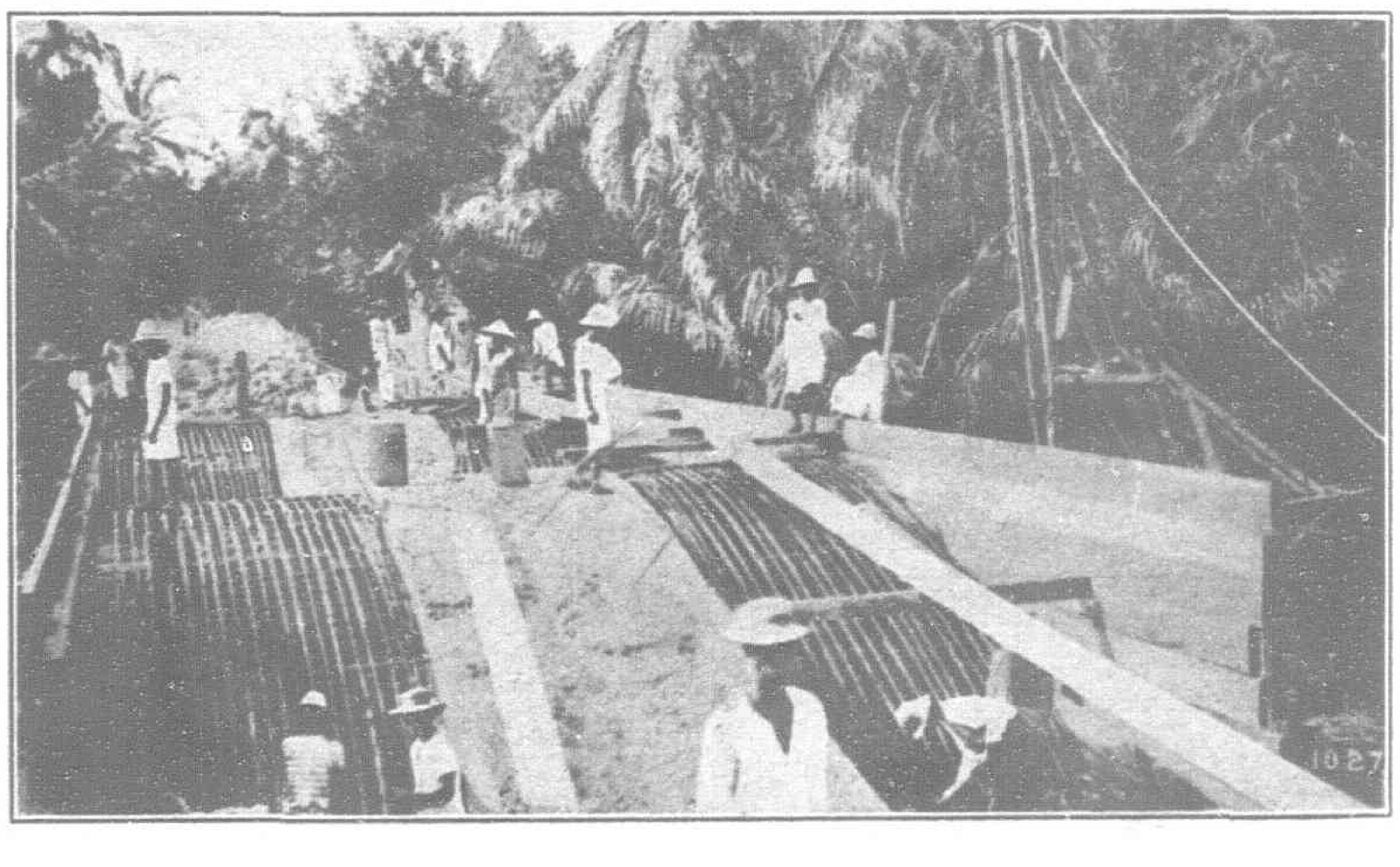
PASAY-ZAPOTE BRIDGE ROAD, PROVINCE OF RIZAL, P. I., SHOWING COMPLETED ROADWAY

CARABAO GRAVEL TRAIN, PROVINCE OF BATAAN, P. I.

(Carabao travels at the rate of about 3 kilometers per hour.)

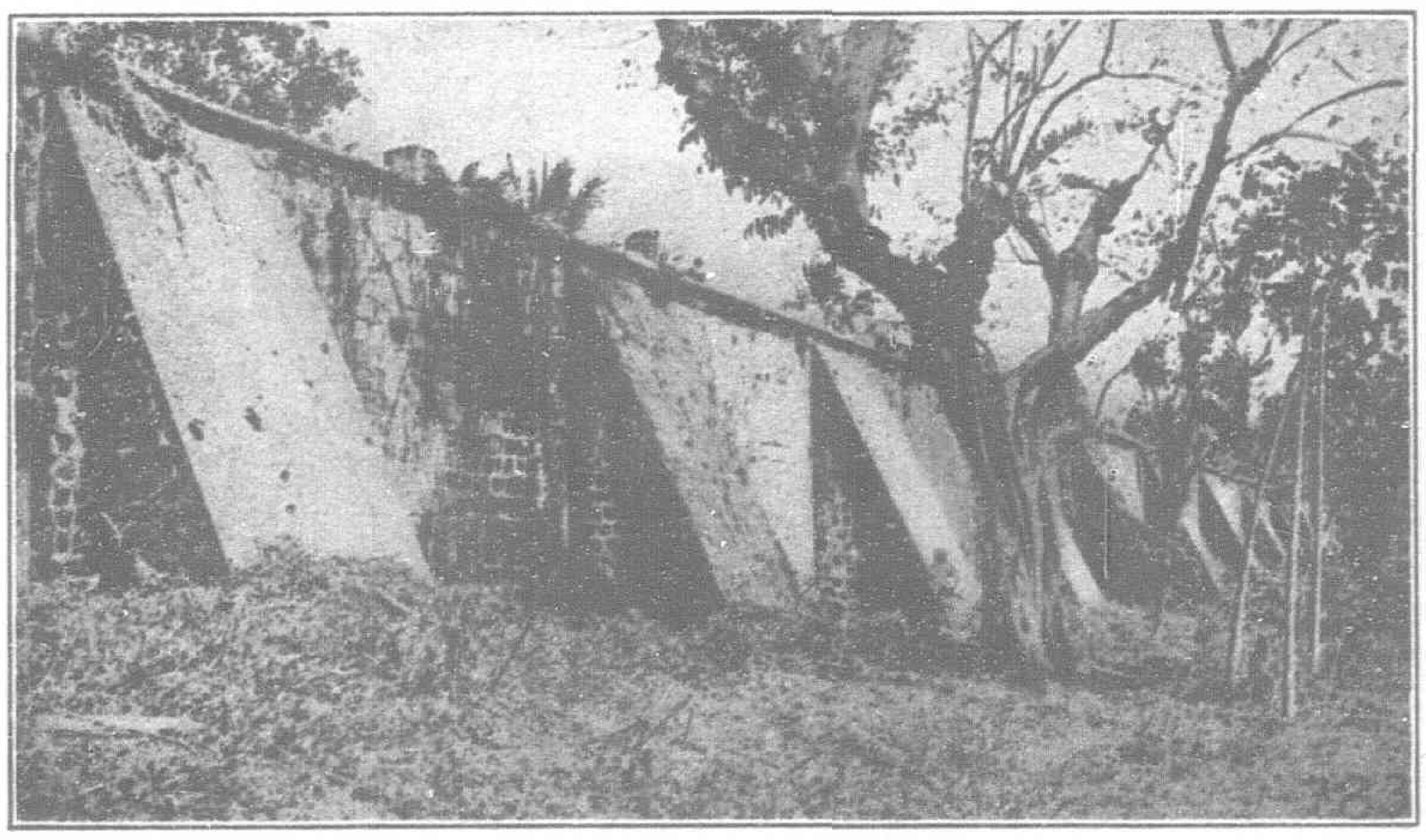


CONCRETE MIXER IN OPERATION FOR BRIDGE CONSTRUCTION ON ROAD THROUGH NIPA SWAMPS, PROVINCE OF PANGASINAN, P. I.



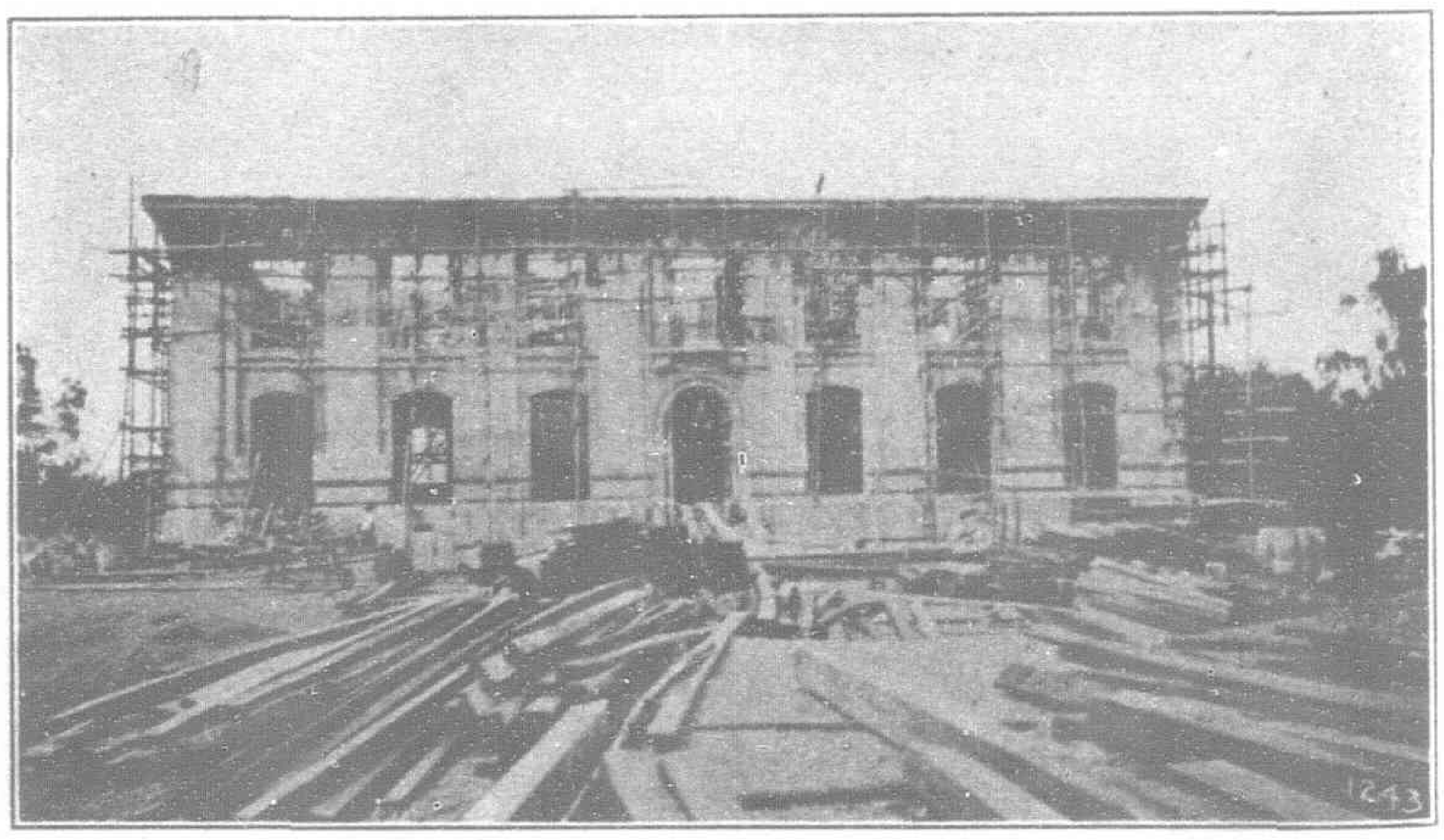
CONSTRUCTION ANULID BRIDGE, PROVINCE OF PANGASINAN, P. I.

(Two spans, 7.15 meters each.)



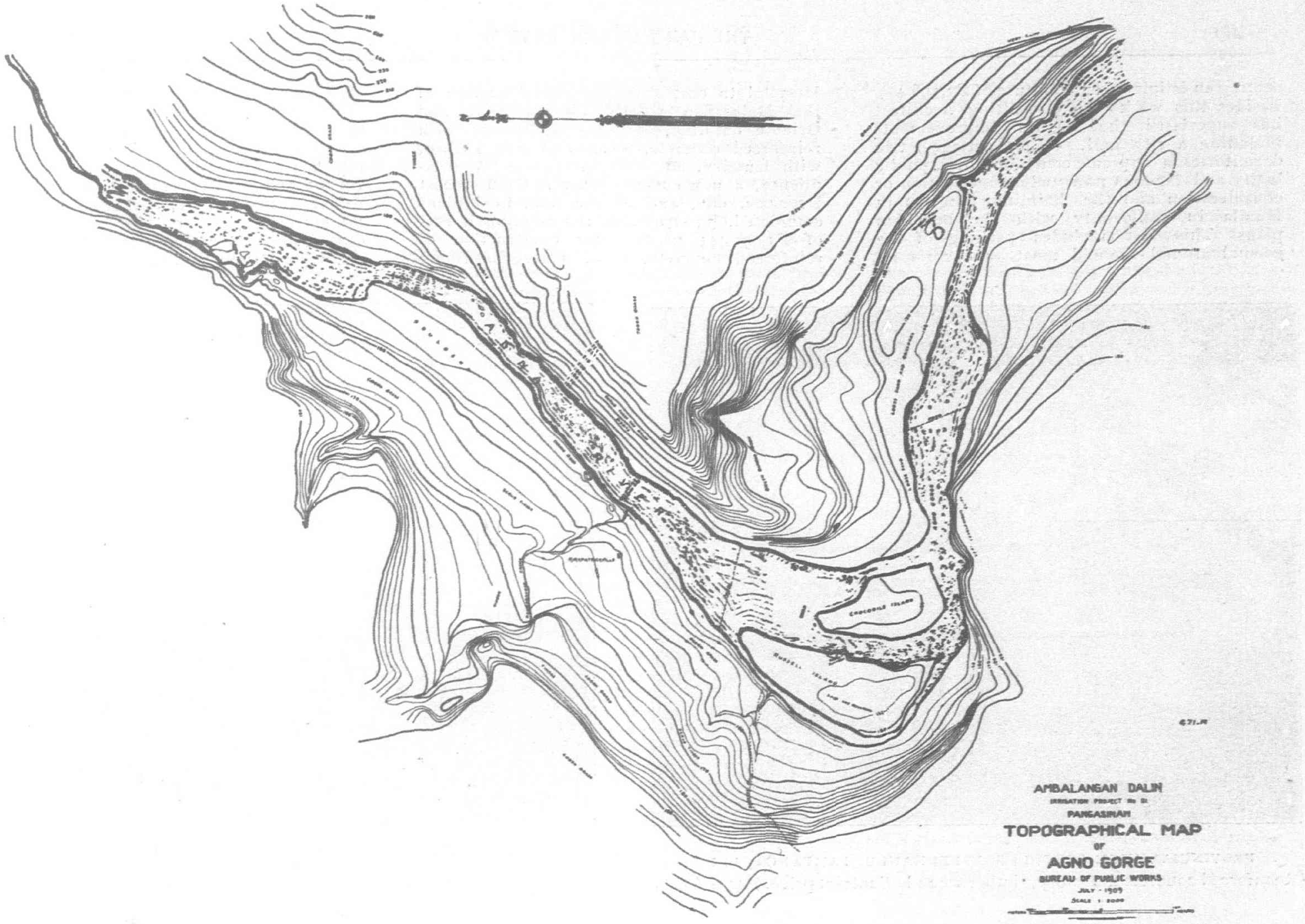
RETAINING WALLS OF APPROACH TO THE OLD BANAO BRIDGE, PROVINCE OF ALBAY

(Bridge destroyed by earthquake, and now replaced by one of reenforced concrete.)



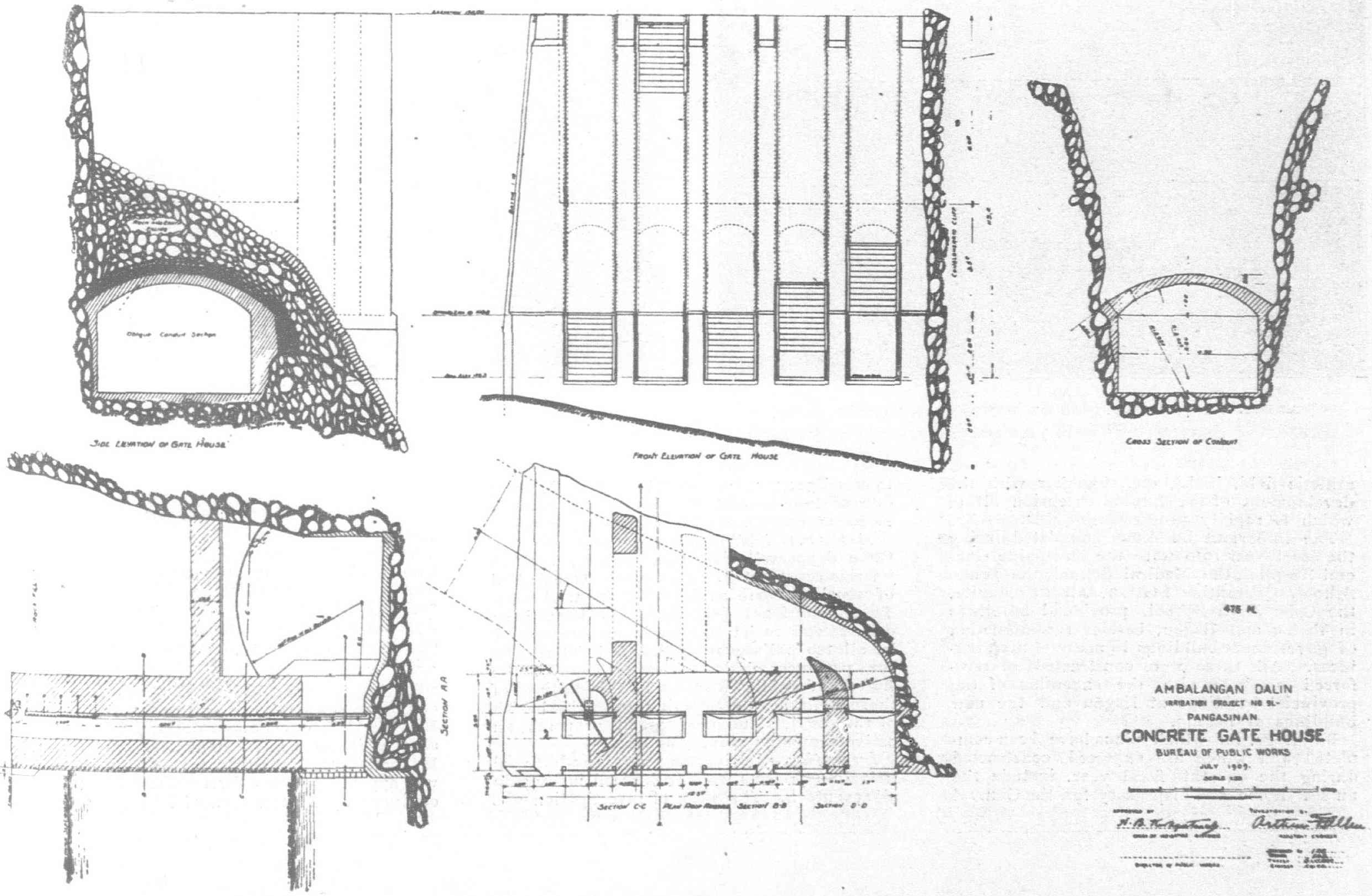
PROVINCIAL BUILDING, PASIG, RIZAL, P. I., UNDER CONSTRUCTION

(Reenforced concrete throughout. Contract price, ₱97,740.)



AMBALANGAN DALIN
IRRIGATION PROJECT No 91
PANGASINAN
TOPOGRAPHICAL MAP
OF
AGNO GORGE
BUREAU OF PUBLIC WORKS
JULY - 1909
SCALE 1 : 2000

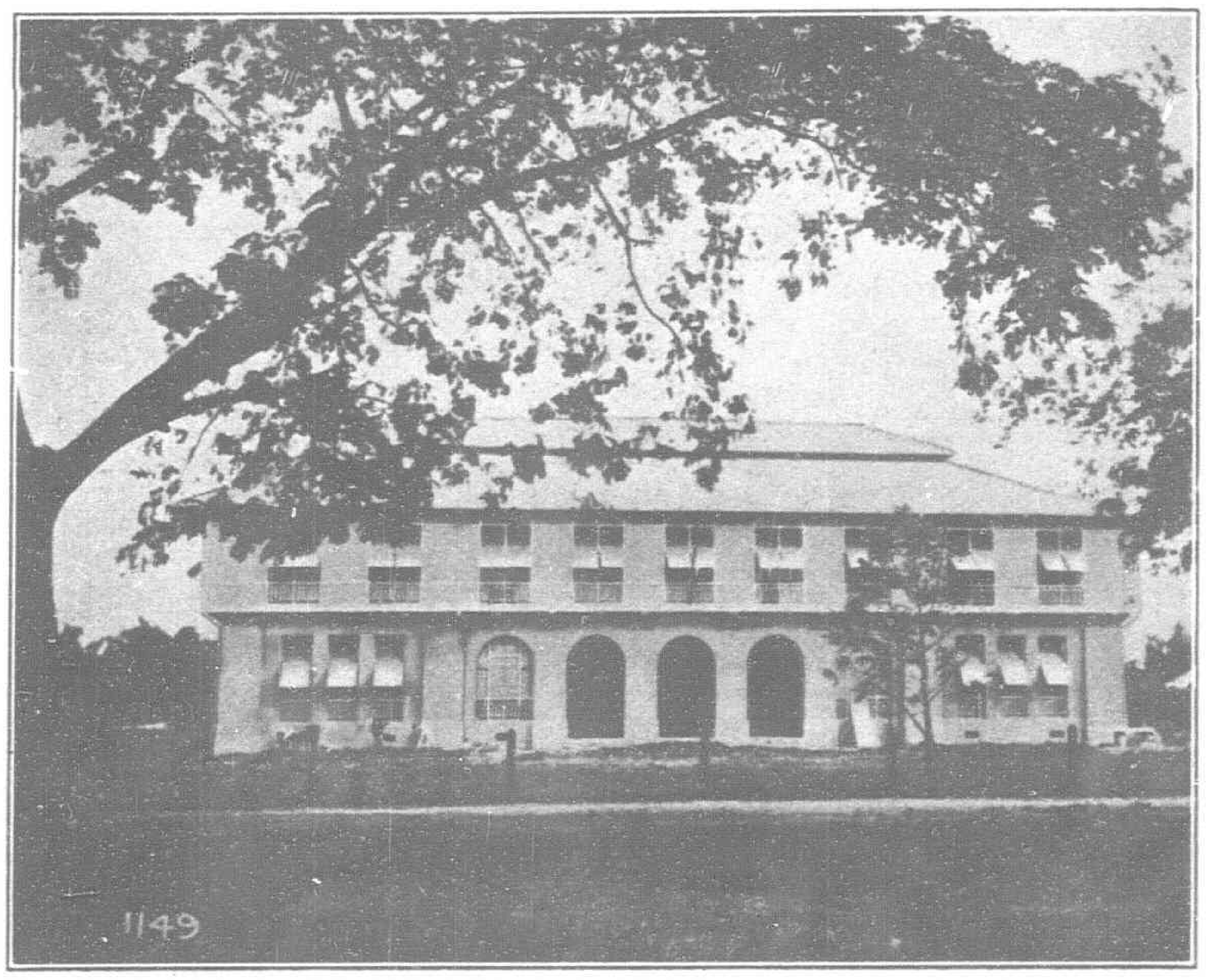
APPROVED BY
H. B. Kirkpatrick
CHIEF OF IRRIGATION DIVISION
INVESTIGATION BY
Arthur F. Allen
ASSISTANT ENGINEER
DIRECTOR OF PUBLIC WORKS



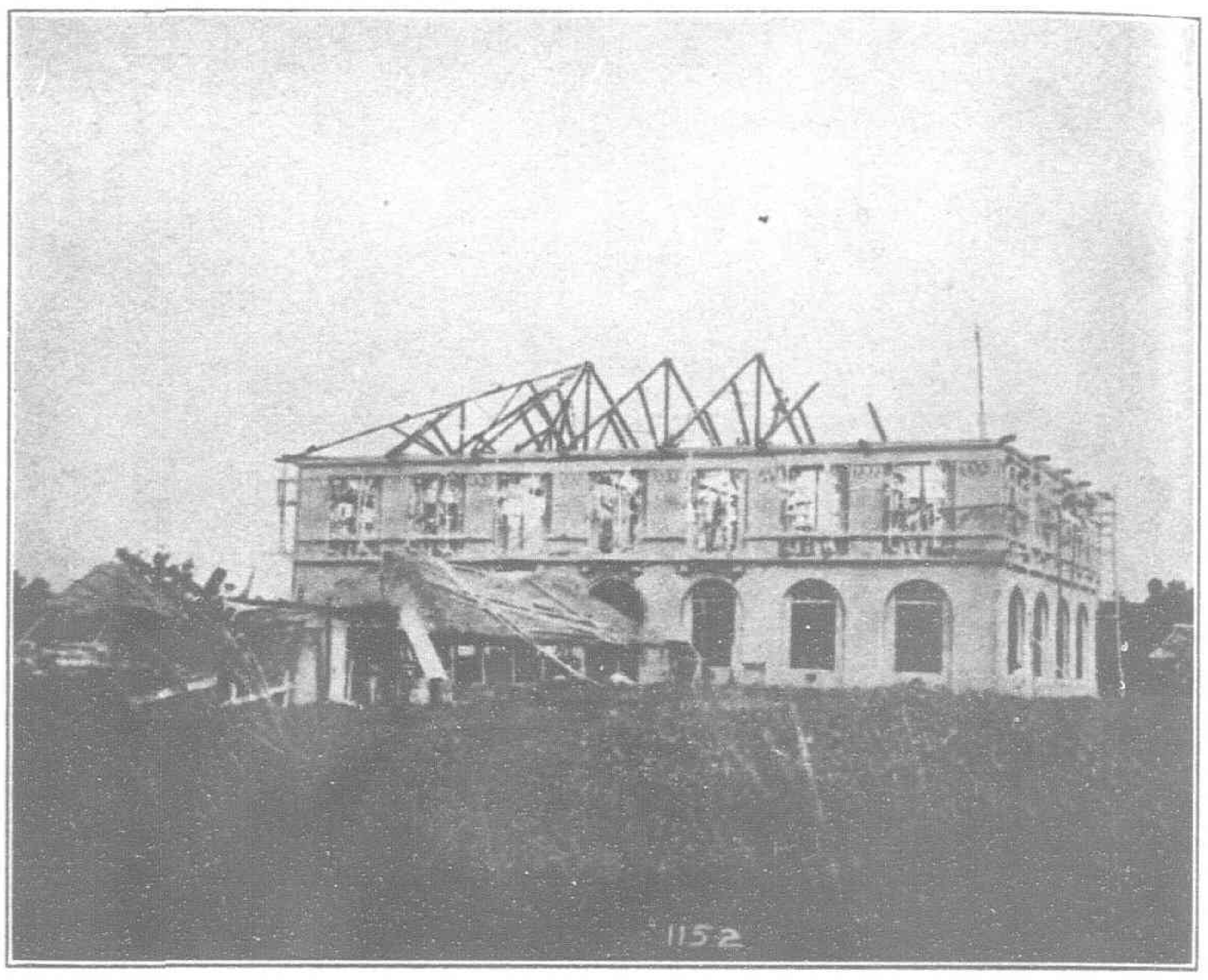
AMBALANGAN DALIN
IRRIGATION PROJECT NO 91
PANGASINAN
CONCRETE GATE HOUSE
BUREAU OF PUBLIC WORKS
JULY 1909

APPROVED BY
H. B. Kirkpatrick
CHIEF OF IRRIGATION DIVISION
INVESTIGATION BY
Arthur F. Allen
ASSISTANT ENGINEER
DIRECTOR OF PUBLIC WORKS

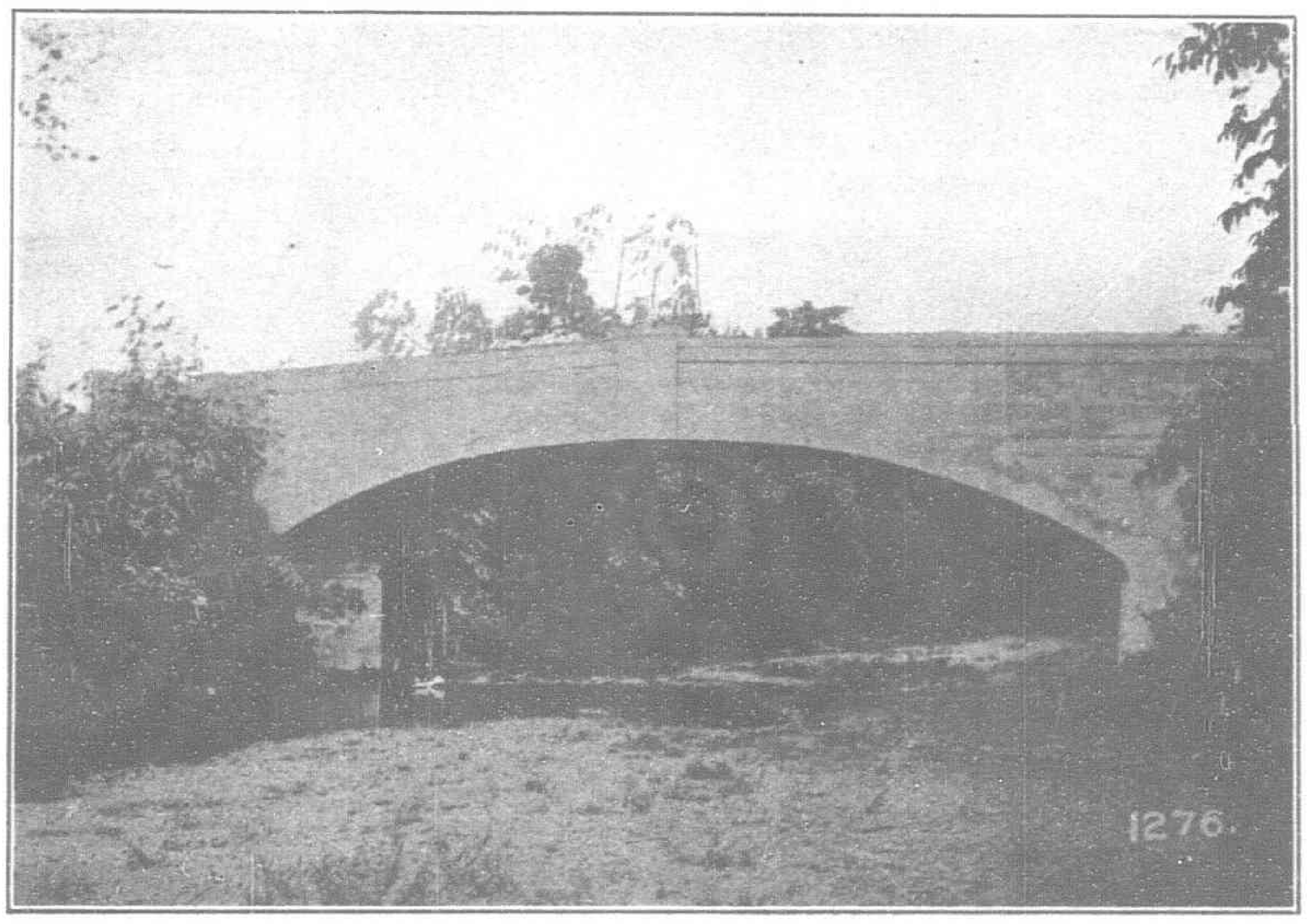
senting an estimated expenditure of ₱3,596,499. Besides this work the Consulting Architect has supervised the Baguio improvements including a city hall, eighty cottages, two dormitories, a supreme court building, public baths and lagoons now under construction or consideration and the building program in Manila in conformity with the Burnham plans. This last includes parking of the ground around the old moat, an aquaria, an athletic field, baths, etc., together with the development of the Luneta extension all of which is rapidly progressing.



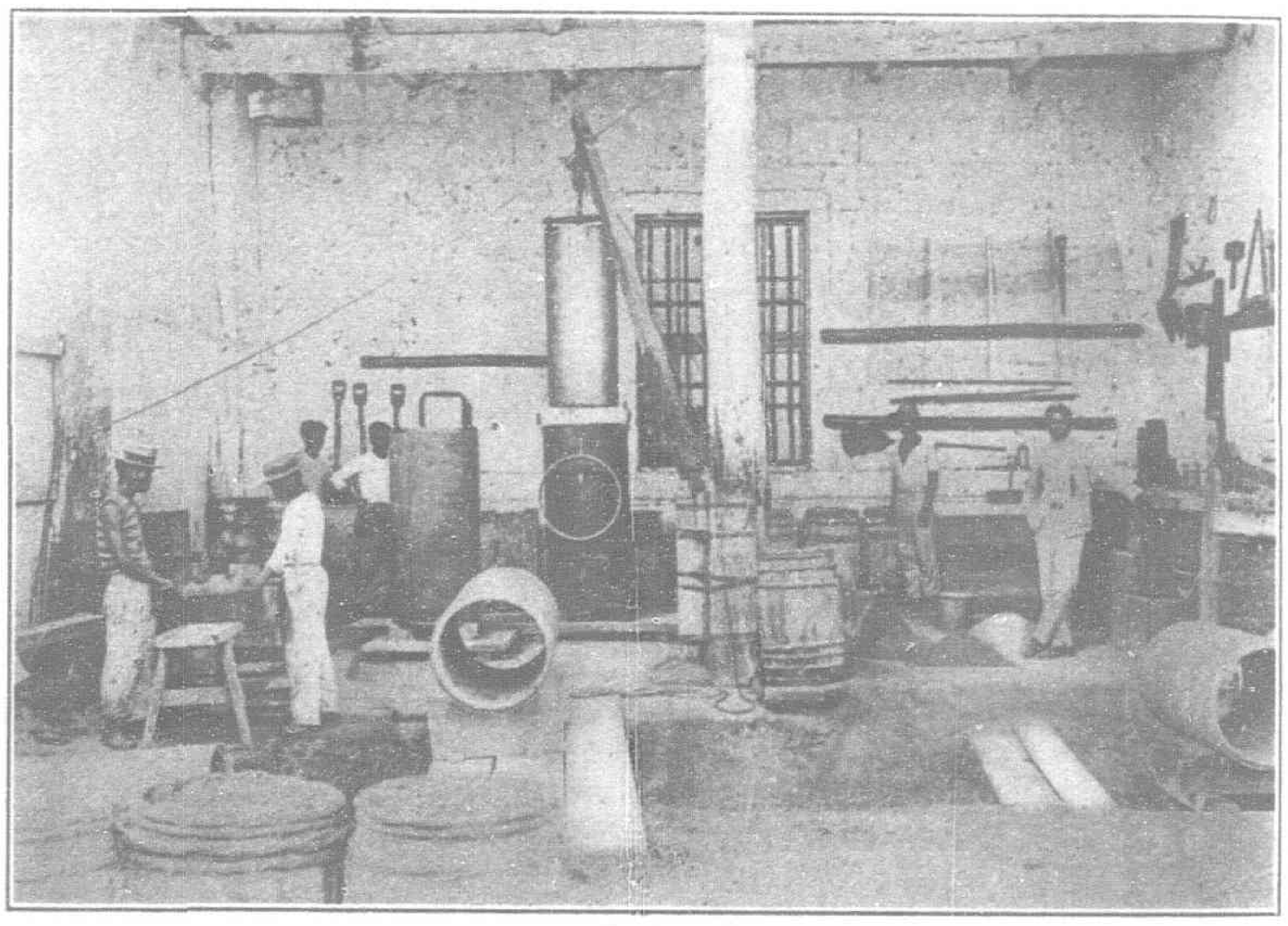
PROVINCIAL HIGH SCHOOL, SAN FERNANDO, PAMPANGA, P. I.
(Reenforced concrete first story, timber second. Contract price, ₱44,606.60.)



PROVINCIAL BUILDING, SAN FERNANDO, PAMPANGA, P. I., UNDER CONSTRUCTION
(Both stories reenforced concrete. Contract price, ₱69,787.)



ANDON BRIDGE, PROVINCE OF OCCIDENTAL NEGROS, P. I.
(Reenforced concrete, span of 10.9 meters. Contract price, ₱2,417.)



CONCRETE PIPE FACTORY, ILOILO, FOR THE MANUFACTURE OF REENFORCED CONCRETE CULVERT PIPES

The important buildings completed during the fiscal year 1910 were the Philippine General Hospital, the Medical School, the Tondo School, Quarantine Station, all in Manila, the Cebu High School, provincial buildings in Tarlac and Ilagan, besides reconstruction of government buildings in many of the provinces. All these were constructed of reinforced concrete with the exception of the provincial buildings at Ilagan and the new buildings at Baguio.

Buildings, for which plans have been completed and which are expected constructed during the current fiscal year, include the nurses' home and dispensary for the General Hospital to cost ₱128,700, reconstruction of the Malacañan palace, the ice plant, and Oriente building, by replacing timber with reinforced concrete, a ward at San Lazaro, with laundry, an addition to the Ayuntamiento, a new custom house in Cebu to cost ₱200,000, etc., and of the total final plans completed, 35 structures representing a cost of ₱1,093,444 provide for construction of reinforced concrete; 13 of native hardwood to cost ₱521,373, one of brick costing ₱20,000; one of stone to cost ₱10,000 and six of other forms of construction to cost in all ₱39,846.

Artesian Wells.—During the year 1910 three deep well rigs were secured and 16 jet rigs constructed. Sixty wells were drilled of which 15 were sunk by deep well rigs. Three additional deep-well rigs have been ordered and 20 jet rigs are being constructed. In all 100 wells were drilled with jet rigs by the provinces under the supervision of the Bureau of Public Works. The installing of these wells have greatly improved the health of the districts and the bureau proposes an active campaign along this line.

Irrigation.—During the year nine additional irrigation projects were authorized making in all seventeen. The work of investigation was continued during the year and at an expenditure of ₱237,400. Up to June 30th, 1909, but three small projects had been completed but during 1910, the Pilar project in Bataan covering 250 hectares was completed at a cost of ₱9,103, and turned over to the Bureau of Lands. Active work in the construction of the San Miguel-Tarlac project has been maintained during the year and contracts for the canal and river structures have been awarded. The beginning of construction on the Ambalangan-Dalin and the Pototan projects await the completion of surveys and land contracts. For the year 1911 there are ₱1,187,272, available for this work. During the year 1910 ₱859,757 were alloted out of a total available of ₱1,062,727. The total yearly appropriation makes ₱750,000 available annually. Irrigation work on the friar lands represented an outlay of ₱25,603.

During the year Major J. F. Case, Director of the Bureau, resigned and was succeeded by Mr. Warwick Greene and during the latter's absence in the United States Mr. Clarence W. Hubbell, formerly city engineer for Manila, was appointed acting director, and later, chief engineer upon the return of Director Green.

THE FAR EASTERN REVIEW

GEO. BRONSON REA, M. E.
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WILLIAM CROZIER, Editor.

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MANILA, SHANGHAI, AND YOKOHAMA, DECEMBER, 1910

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THE AMERICAN-CHINESE LOAN

The arrival of Mr. Straight at Peking, November 27, was made the occasion for renewed interest in the American loan of $50,000,000 gold. Mr. Straight has maintained great reserve as to the probability of the American financiers inviting European groups to participate, yet it is generally accepted that the loan will be underwritten by the American bankers and floated in part in Europe, or be made an international loan with the European bankers signatories with the American bankers to the final agreement, if the latter be satisfactory to China.

In a recent interview, Mr. Thomas F. Millard explains the preliminary loan agreement as simply an ordinary arrangement between Messrs. J. P. Morgan & Co., Kuhn, Loeb & Co., the First National Bank and the City National Bank, and the Peking Government by which the former agree to loan $50,000,000 gold to the Peking Government. This agreement was confirmed by Imperial Edict. No collateral security was asked nor an understanding as to how the money was to be spent. A suggestion as to the advisability of an American adviser was made, but, according to Mr. Millard, it was not made a requirement. He further states that the condition that it be made an international loan was optional with the American underwriters and the Peking Government exercised no influence to make it international in character. If reports be true that the American bankers have invited foreign participation it appears, according to Mr. Millard, that it was on their own initiative.

It would further appear, according to Mr. Millard, that this loan is only the first instalment of a very large loan designed to put China on her feet financially and assist her in carrying out greatly needed reforms. Mr. Millard said:

"The plan proposed is not merely to finance China for this one loan, but to advance further large sums in the future, so as to permit her to carry out certain reforms planned, not only currency reform, but the more delicate and difficult question of official reform.

"An international flotation eliminates the possibilities of rivalry and conflict of interest, and permits of a broader market for the absorption of the large sums which the future necessitates.

"Cooperation on the terms of this loan can only tend to benefit and aid China."

More light is given on the subject by Mr. Putnam Weale in an interview published in the *New York Sun*. He says:

"In my opinion the chief point lies in the fact that the grand objection made by Great Britain in 1909 to a general conference of the Powers to revise the treaties will be removed. It is a fact that China has done nothing toward carrying out her agreement regarding the improvement of her currency, which she undertook to do in the Mackay treaty with England in 1902. The United States signed an identical treaty in 1903, following the Mackay treaty instrument clause by clause, and Japan and Portugal did the same. All these treaties, however, are inoperative until the identical instruments have been signed by all the treaty Powers.

"The acquisition of the $50,000,000, however, will permit China to begin at once the free coinage of silver, as her mints are all ready and simply require the necessary specie The standard will be of the same weight and fineness as the Mexican dollar, whose value is now about 45 cents gold. The main mint in Tientsin will be able to supply the needs of nearly all China within a very few months, and as soon as the dollar makes its appearance everywhere the general financial position of the central Government will be much improved.

"There is another point hardly less important in connection with this loan and that is that China releases herself automatically, to a very large extent, from the bondage in which she has been held by those European bankers who are charged with receiving the matricular payments of the Boxer indemnity of 1900. The fact that hitherto these periodic payments have absorbed all the ready bullion in the country has made it constantly necessary for the Chinese Government to borrow back from these foreign bankers the money she pays quarterly to them, thus emphasizing the condition of financial vassalage in which China has been held so long.

"In the sphere of railway construction this is still no less important. Hitherto by a sort of conspiracy of a limited number of the Powers it has been laid down as a first principle that certain railways shall be built only by certain persons, thus fettering the Chinese to a still greater extent and adding fuel to the flame of the so-called anti-foreign feeling.

"Thus in several directions the loan may be truly classed as eventful. It is the first satisfactory sign that has appeared for the Far East in many months. If this policy of assisting China to regain her authority is persisted in it may not be too late to solve the most perplexing world problem of to-day in an equitable manner.

"The effect of this loan in England will be very far reaching. Although the English press may attempt to minimize the importance of this move, in high places it is quite certain to be accepted at proper value. A change has lately been seen in the English Persian policy, and it is now possible that before many more months have passed there will be a change in the same country's Chinese policy.

"There is one important factor, however, that is not to be lost sight of, and that is the Japanese. That they will make some counter move very soon may be fully expected. It may not be presumptuous to hazard the opinion that that counter move will come in Manchuria itself, and the diplomatic world may therefore now look forward to the beginning of a new period of political activity. The negotiation of the loan may be regarded as a great victory for American financiers, for all the great financial groups of the world have been willing to lend this money to China."

A later Peking dispatch quotes Mr. Straight to the effect that his visit to Peking is simply to arrange the details of the loan. The agreement pertains only to an understanding between the bankers and China and has no political significance beyond a desire to aid China.

The loan will be participated in by different foreign groups and will inaugurate a new departure by eliminating separate "spheres of influence" in the Empire.

The above interview is widely quoted and seems to be authentic. It bears out to a large extent the views of Mr. Millard and Mr. Weale.

However, the Japanese press denies that Japan is opposed to this loan or that she is contemplating a counter move. Indeed, the attitude of Japanese newspapers is generally favorable, although many of the radical prints, basing their comments on misleading rumors, interpreted the loan negotiations as a direct American move against Japan Under date of December 1, the *Japan Mail*, referring to a statement appearing in the *Shanghai Times* to the effect that Japanese financiers advised China to borrow from Japan instead of the United States and that China's refusal to adopt this counsel was the origin of Japan's opposition, points to the ridiculous assumption that Japan desired to lend money to China or had any objection to the American loan being consummated. The *Mail* says:

"It is very evident that Japan is not in a position today to lend China 100 million *yen*, and it is equally evident that, in her present mood towards her island neighbour, China would not be in the least likely to choose Japan for a creditor. Japanese statesmen are perfectly *au fait* of the situation, and nothing is more inconceivable than that they should make to the Peking Government a proposal which would certainly be rejected by the latter and misconstrued by the world. Besides, we are not aware that Japan has declared herself hostile to the 100-million loan. It is not even known whether she has claimed a right to be a partner in the transaction, and we take it as tolerably certain that on no other ground, except her own seclusion, will she be at all disposed to obstruct a transaction in which American, German, French and British financiers are said to be interested. As a matter of fact, the Japanese press has hitherto been remarkably reticent about this loan, and if we were asked now to state the view held in Japan, we should be puzzled to do so."

Quoting the *Mail* further:

"Without mentioning its authority, the *Nichi Nichi Shimbun* publishes in large type an emphatic denial that any objection has been raised by Japan to the Chinese loan or that any demand has been preferred by Japanese statesmen for participation in the loan. All that Japan has done is to express in Peking friendly confidence that she will not be excluded from the privileges accruing to the creditor countries. So far from there being any truth in the rumours hitherto published about an objecting attitude on this country's part, it is a fact that the four Western Powers concerned in the transaction are desirous of securing the cooperation of Belgium and Japan. It is not likely, however, that Japan will take any definite step without consulting China's inclinations, and measures are said to be in process or in contemplation with that object. If Japan becomes one of the creditors, she will probably be represented by the Specie Bank and the East Asia Industrial Company (To-A Kogyo Kaisha)."

An interview with Mr. Odagiu, a director of the Yokohama Specie Bank, appears in the *Japan Times* of December 1, in which the director said "that he could not tell whether a loan of $50,000,000 had actually been concluded between the Chinese Government and the International Banking Corporation, but that he thinks it quite possible that that has already been done, in view of the past relations between them. What remains to be done is, therefore, the preparation of its details. There seem to be some who suppose that the loan negotiations have come to a standstill as the English, French and German groups have stepped in to participate in it. It must be remembered, however, that the International Banking Corporation represents not only the interests of America but those of England, France, and Germany also. It is quite natural, therefore, that these three groups should also take part in the loan. On the other hand, America may wish to monopolise the loan, but she dare not take that step, for fear that her money market would be disturbed if the whole amount of the loan is supplied by her market alone. She has, therefore, it seems, proposed to English, French, and German capitalists to participate in the loan. As for the amount to be taken up by each group, they will differ according to the condition of the money market and other circumstances. As America has, however, taken the initiative, she may have proposed to send a financial commissioner. But it is a question whether other three countries will agree to the proposal. They may agree to the appointment of a financial advisor, but they will flatly refuse to allow America to send a financial superintendent. Nevertheless, this matter will be settled in some way or other, and the loan will finally be signed at no distant date.

"It is also to be noticed that there has been a secret understanding between England, France and Germany to take concerted steps towards China and that America has now joined in this understanding. No one can decide at once whether this means the failure of Russia and Japan that they do not participate in the loan. Supposing, however, that Japan did take part in the loan, she would receive some check from other groups and might not be able to get a fair share owing to her economic condition."

From London cablegrams we learn that President Taft in his message outlines America's policy in China. He stated that it had for its purpose the encouragement of the investment of American capital in China to assist development without prejudice to her national independence.

Reuter's Agency in referring to the European participation stated that while the arrangement "allows complete independence of action to each nation it abolishes the financial spheres of the old policy, under which one financial group has been playing off against another.

"Finally, by securing equal participation in the loans in any portion of China, the agreement disposes of the idea of conquest in China by any Power by means of railways."

Our latest advices from Peking confirms former reports in that the American Group has invited European participation and there is no reason to believe that Japan has not been included, so that the only objection to the loan arrangement with the American bankers, readjusted at the instigation of the latter into an international loan, may be expected to come from China.

The impression received points to a desire on the part of Peking to have the loan go through as originally arranged with the American Group and it may be that when the matter of adding the other western groups as signatories to the agreement, requiring an amendment to the original form, is proposed, it may meet with serious opposition from the Chinese. If our impressions are correct, we would have a rather unusual loan situation. The American bankers on their own initiative encouraging European participation and the Peking authorities opposed to treating with any but the American Group.

That the proposal of the American Group designed to eliminate spheres of influence is the most desirable adjustment of China's financial embarrassments, is generally admitted. And we see in this international arrangement a practical endorsement of America's policy since it might be called the first step in the direction of the "neutralization" of China's foreign loans which in effect would prove more potential than a similar international agreement limited simply to assisting China in the development of the Eastern Provinces. And what must be most gratifying in all these negotiations is that the attitude of the American bankers has been consistant with the spirit of America's declared policy, thus disposing of any possible suspicion of ulterior motive heretofore more or less covertly mooted.

Having a bearing on this subject and expressive of British sentiment in relation to intercourse with China, we quote from the report of the annual dinner of the China Association an excerpt from a speech by Mr. C. S. Addis denoting approval and support of international cooperation.

Mr. Addis said:

"I began by asserting that there was no essential antagonism between the interests of the Powers and China. Let me end by saying that there is no longer any real cause of difference between the Powers themselves. The whole trend of modern diplomacy at Peking is to attenuate such differences as still remain. Spheres of influence, spheres of interest, and such like obsolete litter have been swept away into the limbo of the past. Concerted action has taken the place of the old game of beggar-my-neighbour to the great advantage of all concerned. But this is not all. For diplomacy is the handmaid of commerce, and now you have the representatives of European, and laterly, I am happy to add, of American finance, meeting in conference in order to compose their differences and, while preserving the complete interdependence of the groups, to associate themselves together for the harmonious prosecution of their common aims for the peaceful development of the Chinese Empire. In the pursuance of this policy we are under repeated obligations to the British Minister. (Cheers.) It is ill speaking of a man to his face, a task rendered none the less difficult in any case by an unbroken friendship of five-and-twenty years, but I am merely stating the bare fact when I say that the happy change in international relations to which I have alluded would not have been possible but for the confidence reposed by China and the Powers *alike in the loyalty and good faith* of Sir John Jordan. (Loud cheers.) If not exactly a Scotchman, Sir John must be allowed to have all the requisite ability. (Laughter.) His complete knowledge of Chinese affairs, his aready sympathy with ll classes, and his unswerving rectitude have lent an added weight to British counsels in the Far East, and have won for himself that good name which is rather to be chosen than great riches."

MODERN EDUCATION FOR CHINA

Publicists generally agree that the most potent influence working towards the regeneration of the Chinese is the school. It is true that the initial educational work along modern lines met with serious obstacles, and not a few pioneers admitted failure, but many prejudices have been overcome and during the last decade there has developed a marked disposition in many sections of the empire welcoming western education.

To the early pioneer missionaries must go much of the credit for what has been accomplished. They were not thoroughly equipped to undertake this work successfully. As a rule they were evangelists carrying out what they believed to be a divine mission in preaching the gospel to every creature, not with any too much consideration for the sensitive feelings of the Chinese, or respect for their customs or their philosophies. There was little of the spirit of toleration in those old warhorses of the church.

But better understanding came later, with more intelligent direction of energies. The sympathies of the Chinese were enlisted in direct ratio to the measure of regard for their customs and established forms of etiquette.

Schools scattered here and there made their appearance in the centers of population, but little general progress was noted until the youth of the country sent abroad to be educated returned graduates of modern universities. To these young men must be accredited much of the development of the now almost national desire to apply to the work of modernizing the nation the best in western ideals.

This very desirable ambition has not lacked outside encouragement. Among the most important educational movements of recent years is the plan of the Universities of Oxford and Cambridge for the establishment of a Chinese University having for its purpose a comprehensive educational program covering all the arts and sciences.

There is some difference of opinion as to the advisability of western initiative in this and other educational movements in China. One school appears aggressive and places the wishes of Chinese generally as a secondary consideration while another school does not believe in participating in any educational movement in China unless upon voluntary solicitation of the Chinese.

We have in mind as illustrative of the attitude of the latter school a letter written by Professor Bailey Willis, a noted geologist of the U. S. Geological Survey, addressed to the British projectors of the Oxford and Cambridge movement declining an invitation to cooperate in the China University scheme. As one of his reasons for declining Professor Willis wrote:

"This arises partly from the fact that I expect to be in Patagonia for some time to come but more particularly from the conviction that it will be best for China in the long run if she works out her own salvation in educational matters. During my residence in China I became deeply impressed with the power and originality of the Chinese mind and also with the fact that it possesses characteristics which will lead it to develop along lines of thought that are not wanting in our own thinking but are less potent with them. I refer to the well known differences between the philosophical mentality of the Chinese and the inventive ingenuity of the western peoples. There are broader reasons resting upon views which I hold as to the evolution of the human race and the certainty of survival of the highest intellectual and moral type which lead me furthermore to believe that it is desirable that an individual people like the Chinese should develop a civilization without interference on our part and only in so far as they themselves may find it advantageous, to avail themselves of our learning."

This remarkable letter voices the opinion of a large number of publicists familiar with the general attitude of the Chinese in the past. As with the regulation of Chinese loans so also in introducing western education little or no consideration, up until recent years, was given the wishes of the Chinese. In all these matters China assumed the role of "passive resistance" and we are not unconvinced that the introduction of western education in China would have been more generally popular years ago if men of the Professor Willis stamp had been identified with the early work.

However, hindsight is always less obscure than foresight and the many sacrifices of the early educational missionary, full of zeal and backed by the courage of conviction, have not been in vain. Western education is now desired by the Chinese in large measure and every movement designed to meet the demand is worthy generous support. The spirit of fairplay is entering into the relations of foreign nationals with China and as it becomes the more general, western institutions will be the more welcome.

Hongkong is interested in a university movement not onlyof vital importance to the colony, but one sure to wield a large influence in South China.

Again there is the Philippine University, while proposed originally for the sole benefit of the Philippines, is ambitious to lead as an exponent of Western ideals in the Far East. In this the *Manila Times* is not in doubt as to the feasibility of such an educational contract. Under the caption "*Why Not a Great Oriental University*," the *Times* says:

"'Why not make the University of the Philippines a great educational center for all the far east, an institution that will attract students from China, Japan, Siam and the rest of the orient and teach them the higher American ideals? Here in the Philippines and in the rest of the far east we Americans have chiefly shown our material side and that is our least attractive side. Why not give the east a chance to fully see the other side? Education is capable of giving Americans and Filipinos an understanding, a communion of thought that nothing else can confer and if there is to be any conquest of the east it can only be the conquest of education.' These questions were asked these comments made by a recent visitor who is engaged in unheralded but very searching examination of conditions in the Philippines, during a conversation with the writer and they certainly serve to inspire the imagination. It would be possible to create here a great institution based upon high western ideals and yet fitted to its larger environment. Thousands of oriental students are now sent abroad every year, and under sufficient inducement a considerable proportion of them could be brought to Manila. Distance, economy of living and the avoidance of such complete isolation from home would all be strong factors favoring the project. Such an institution should make a special appeal to the Chinese who show an increasing desire for western education and are now going in large numbers and at large expense to colleges in the United States.

"The economies of the time would probably make it impossible for the Philippine government to provide a university of the kind suggested. In truth it will be hard put to provide facilities for the higher instruction of all the young men and women who now press up from its own schools. But the project is worthy of the consideration of the United States government itself, worthy of the thought of the men who have in their keeping huge foundations like that created by John D. Rockefeller and the late Russell Sage, worthy of the philanthropy of men like Andrew Carnegie.

"Such a university would insure the success of the mission undertaken by the United States in the Philippines and materially strengthen the main position of the United States in the far east.

"This ideal is not the empty dream of a dreamer. Good foundations have already been laid. In the Philippine Medical school, recently incorporated in the University of the Philippines as the College of Medicine and Surgery, with the splendid facilities of the new General hospital, we have an institution better equipped than many American schools. The new buildings about to be equipped and opened at Los Baños put the College of Agriculture on a substantial basis while wise beginnings have been made in the teaching of veterinary science with requirements for admission as high as the best veterinary schools in the United States. Moreover in the Bureau of Science there is an unusual opportunity for providing advanced research work such as characterizes the most important universities at home and it will undoubtedly be made a part of the university.

"We have already the beginnings of what may be a great institution worthy of the help and encouragement of all who are interested in making Manila the intellectual center of the orient."

The above proposal is no idle dream. In the Philippines many dreams are not of the idle variety. Many have come true. We are assured that plans for carrying out this project have already taken form.

Besides all this foreign activity China is helping herself. A program looking to the establishment of primary and intermediate schools, has been outlined, and in some provinces successfully carried out. Schools and colleges have been springing up in almost every large center. Western methods are being introduced and foreign languages taught. The educational program includes universities in Peking with a view to making the capital the great educational center of the Empire. Provinces are vieing with each other in the matter of advanced education.

Now that there is promise of a general reform of China's finances with relief by more generous foreign loans, we may expect one of the most remarkable national educational campaigns of modern times directed so as to benefit from the experience of modern nations in this important department.

JAPAN'S FOREIGN TRADE

The phenomenal growth of Japan's foreign trade and the means of encouraging further expansion was the subject of a speech delivered by Marques Katsura at a dinner given in Tokyo by the Foreign Trade Association of Japan last month. Among the references of special interest was the statement that up to the end of October the ratio of exports to imports as compared with former years promised to place the balance of trade in favor of Japan by the close of this year. The Premier stated that the imports exceeded the exports by yen 1,600,000 while for the corresponding period 1909, the excess was about yen 20.000,000. Marquis Katsura said:

"Turning to the eternal trade of the country, the better condition of financial world abroad since last spring had a favorable effect on our trade with America, in which the export of raw silk and tea, the most important of our exports, presented unusual activity, while the plentiful crops of agricultural produce in China and the consequent increase of the purchasing capacity in the Chinese markets offer a hopeful future for the export of cotton yarns and other merchandise to China. To explain in figures the total volume of exports and imports since January last shows an increase of 113,000,000 yen in round figures as compared with the corresponding period of last year. Although the amount of imports so far shows an excess of about 1,600,000 yen over exports, it is possible that by the end of the year exports will exceed imports, trade thus resulting in favour of this country. The reason for the increase of imports is chiefly ascribed to the increase of import of raw and ginned cotton, iron, wool and some other raw materials, while that for the increase of exports is attributable to the increase of exports of cotton yarns, raw silk, cotton stuffs, habutaye, tea and other manufactured articles and manufactured raw materials. In short the relation between the export and import trade may be said to be in a very satisfactory condition, such as has never been experienced in recent years. Viewed from all directions, it is plain that our economic world and foreign trade have already emerged from the period of the prolonged inactivity since last year and are now in a fair way of development. This favorable tendency is partly to be attributed to the energetic efforts of the gentlemen interested in those lines of business. Comparing the volume of the country's foreign trade in 1885, the year when the present association was inaugurated, which was then about 81,000,000 yen, with the total volume of exports and imports for last year amounting to about 807,000,000 yen one is startled at the remarkable growth of our foreign trade made in the course of only twenty-five years. This is a matter for congratulation to the country."

He urged that manufacturers should endeavor to improve their methods with a view to securing greater economy in operation and better quality of product. He then touched on the necessity of encouraging high standards of business morality in the attainment of any degree of success. On this subject he said:

"It is not less important that those engaged in foreign trade should always bear in mind that the secret of ultimate success in commerce lies in the respect for business morality, while making efforts to investigate the condition of foreign markets, the condition of demand and supply, and the turn of taste and fashion, thereby to develop the market of our manufactures. For the furtherance of this purpose it is required of merchants to be quick in securing all available opportunities and to be firmly determined to overcome all difficulties and hardships, without being influenced by the elusive gains of the moment. Manufacturers, bankers, traders and the businessmen engaged in the transportation of goods are companion travellers, so to say, sailing in the same boat in the commercial sea and must always maintain a close and smooth connection between themselves, but for which all other efforts to enhance the trade development of the country will be of little good. As regards the means and ways to promote the commercial development of the country the joint efforts of the Government and of businessmen directly concerned in the line are of great necessity in bringing them to a fruitful result. With this view the Government has some time ago organized the Productive Resources Investigation Committee as you are all aware, and has started the work of investigation into the best ways of promoting the country's foreign trade. The members of the Foreign Trade Association are requested to pay special attention to this point and do their best to contribute to the commercial development of this country."

It is unnecessary to state that his speech made a profound impression and will no doubt serve to make for greater co-operation and stability. The remarkable growth of Japan's foreign trade during the last twenty-five years may well be considered indicative of the commercial potentialities of the country and its people. And it might be said that Japan's success is largely due to the adaptability of her businessmen to conform to changed conditions and the intensity of their desire to keep well to the fore by adopting the best in western methods on their merits and without permitting any local prejudice to obscure their judgment.

PROPOSED FUSION OF STRAITS SETTLEMENTS AND FEDERATED MALAY STATES

At the annual Straits dinner in London Mr. E. C. Ellis announced himself an exponent of the amalgamation of the Straits and the States under one administration, on the grounds that it would work for greater economy and remove the possibility of antagonism and friction. His speech has not been very warmly received in the Federated Malay States. The press of the States is satisfied with the present status and refuses to admit that the interests of the States and the Colony are identical.

In his speech Mr. Ellis, referring to the finances of the Colony, said:

"The answer to that question, to my mind, is the fusion of the Colony with these great tracts of country known as the Federated Malay States, which we have done so much to bring to their present position. (Sir Frank Swettenham: "No.") I know there are bitter opponents to that. I think it is quite possible that the suggestion I have made may raise the cry of 'Hands off our revenue.' Gentlemen, I have no idea in my suggestion of attacking the coffers of the Federated Malay States, but, even if I had, I think there is ample justification for it. I ask you to consider what would be the position of the Malay

Peninsula to-day, what would their revenues be, but for the fact that the Colony is at their foot? We have given those countries of our best in men and money in their development, and as the Colony would be nothing without the Empire behind it, so do I assert that the Federated Malay States would be nothing without the Colony behind it. (Sir Frank Swettenham: "No.") I am aware that I am preaching heresy in the minds of many. We have protected those States from aggression, we have built up their country, and I do not think it is unreasonable now to ask them to contribute to our cost of administration. I am aware that opposite views are held, and that a distinguished and experienced personage, who I regret to see is here to night so that he may bowl me out, holds the view that such a proceeding would constitute a breach of faith. ("Hear, hear" from Sir Frank Swettenham, and laughter.) I humbly differ from him. After all, a treaty is only a contract, and if the parties to that contract meet together and come to the conclusion that it is to their mutual advantage that that contract should be modified or varied or even rescinded and a different one entered into, where arises the breach of faith? If I were suggesting that the greater forces which our Empire holds should be exerted to coerce the rulers of those States, it might be a different matter. I am not suggesting anything of the kind. Surely there is something to be gained by consolidation of the Colony with those countries. I would repeat that I am not after those coffers, although incidentally, no doubt, they would form part of our property—(laughter)—yet it would only be in common with themselves. We are not taking it away from them, and they would also share whatever property we may possess. Gentlemen, I am not putting this forward in a laughing or joking strain at all. The amalgamation of the Colony with the Federated Malay States I advocate on many grounds, some of which I will endeavor to enumerate. Consolidation must bring power. It brings strength. It will effect economy in administration. It will remove those vexatious disputes as to what are fair and proper contributions in matters of importance to both countries. It will remove antagonisms and smooth away petty jealousies, and result in one powerful organisation having one sole object, which is the welfare and advantage of the community as a whole. The aborigines of the Colony and of the Federated Malay States are one race and can it be suggested that the Malay in the Colony is less well governed, is treated with less sympathy, is less understood, or treated with less consideration than he is in the Federated Malay States? What has he to lose by amalgamation? Is it any loss to him that his country forms part of the greatest empire the world has ever known? That is the position that I advocate. The views which I have been putting forward I hope are shared by many. At the same time, I am putting these views forward at the instigation of no one but myself. In conclusion, while thanking you on behalf of the Colony and the Federated Malay States, and also on my own behalf, for the way in which this toast has been received, I would express the fervent hope that before very long this toast may have a shorter and more compact title, arising out of that fusion which I think should take place, and because those countries which geographically and in race are one have become so in every sense of the word. (Cheers.)

At the meeting of the Federal Council held about the same time Sir John Anderson made reference to a change in the title from Resident General which was interpreted as being more than a simple coincidence. However, His Excellency discounted the idea that the appointment had any reference to fusion as proposed by Mr. Ellis and stated that things would go on as heretofore. The *Malay Mail*, however, is not altogether reassured and says:

"It may be admitted that the existence of both a High Commissioner and a Resident-General would not appear to be a vital necessity, so long as there exists machinery for the safeguarding of F. M. S. financial interests. The difficulties experienced by His Excellency in protecting several interests which—with all due deference to Mr. Ellis, Mr. Allinson and others—are not identical must be very great, and, although it may be urged that H. E. has no reason to favor one interest at the expense of another, the existence of a strong Resident-General is by way of being an insurance against F. M. S. interests suffering. Failing that, we have maintained—and continue to maintain—that the Federal Council should have full powers over F. M. S. finances. As things are, the Council has not, and does not appear likely to acquire, such powers, and now the Government is taking a step which can only be regarded as weakening the safeguard which previously existed. It was stated in Council that the definition given of the position of Chief Secretary was believed to be in accordance with the intentions of those who originally invented the Resident-General. Under the Treaty of Federation the Rulers 'agree to accept a British Officer, to be styled the Resident-General, as the agent and representative of the British Government under the Governor of the Straits Settlements.' If those inventors meant 'Chief-Secretary,' it may be asked why they chose the title of 'Resident-General.' H. E. assured the unofficials that they had nothing to fear, but on the facts it is hardly surprising that the change should be regarded by many as a step towards the ideal of Mr. Ellis. For ourselves, we cannot believe that the Government would ever contemplate such a step as a breach of its treaty obligations. We may be pardoned if we fail to see the necessity, from the F. M. S. point of view, of the fusion advocated by Mr. Ellis. The prosperity of this country is freely admitted, and we prefer to advocate a policy of leaving well alone. That prosperity is tangible; the benefits which this country would derive from amalgamation are, to put it mildly, nebulous. It is significant that both Sir Frank Swettenham and Sir Hugh Clifford, two administrators whose names are inseparably associated with the Malay States, should have emphatically disagreed with Mr. Ellis, and they were supported by Sir William Taylor. Sir Frank Swettenham certainly served most of his time in the F. M. S, but it must not be forgotten that he was also Governor of Singapore."

The Federated Malay States are enjoying an era of wonderful development and local pride in the accomplishment is general. It has been up-hill work and many discouragements had to be met. In some respects, the pioneers believe they were not accorded any great measure of sympathy from the Straits Settlements when it was most needed and now that they are entering into the promised land, they are naturally jealous of their independence. They are unconvinced that fusion would not restrict their control of local affairs and hamper them at a time when they should have greater freedom in working out their own problems.

PHILIPPINE TRADE

When the Payne Bill became law in 1909 and reciprocal relations were in large measure established between the Philippines and the United States, foreign merchants were alarmed of its probable effect upon their trade. A review of the report of the Insular Collector of Customs confirms the opinion advanced by the REVIEW at the time that a general impetus given to trade by the new arrangement would be realized. We note that during the year 1910, the imports from the United States amounted in value to $10,776,128 gold as against $4,693,831 gold in 1909, an increase of approximately $6,100,000 gold, while the imports from foreign countries for 1910 reached a value of $26,285,797 gold as against $23,100,651 in 1909, an increase of approximately $3,200,000. To the importer of foreign goods, the result must be more than reassuring in view of their preconceived theories of disaster.

In exports also an increase is noted in foreign trade. In 1910 the value of exports to the United States reached $18,751,420 as against $10,155,087 in 1909, an increase of approximately $8,600,000, while the export to foreign countries in 1910 amounted to $21,135,430 as against $20,890,391 in 1909, an increase of $245,000. So that notwithstanding the Payne Bill offering a special market, there was no falling off in this department as might have been expected.

It will also be noted that the increase in export to the United States for the year was greater than the increase in imports from that country showing a balance of trade between the dependency and the United States in favor of the islands of $8,000,000. On the other hand foreign countries purchased Philippine products to the value of $21,135,430 and sold the Philippines goods to the value of $26,285,797, a balance of trade in favor of foreign countries of approximately $4,150,000. A further analysis places the increased export of sugar and tobacco to the United States at $6,600,000 while the hemp and copra increase amounted to $1,600,000 approximately. The increased export to foreign countries represented in copra alone was valued at $2,350,000 and this was counteracted principally by a falling off in sugar export to China and Hongkong to the value of $1,900,000.

While the general increase in trade compared with previous years is very gratifying to the American merchant it seems remarkable that the American manufacturers failed to secure at least an amount equal to the purchases made of insular products and especially so since returns show that foreign countries secured a large balance of trade in their favor.

This is difficult of explanation, but we believe it was largely due to the appreciation of the opportunities for trade expansion in the island by foreign manufacturers together with their thorough knowledge of conditions and their disposition to study the latter so as to cater to the native's taste. It must also be remembered that well established foreign houses have connections and branches all over the islands and are thus largely in control of the most effective avenues of distribution. These houses have been in business for many years and have established reputations which in a tropical country is most valuable capital. In addition, the European manufacturer extends a liberal line of credit to these houses and assists in every way in advertising and otherwise introducing his goods. Again, the European manufacturer gives his especial attention to foreign trade and the importer in the islands handling his goods can always depend upon having orders filled expeditiously.

On the other hand, the American manufacturer generally has not yet realized the importance of a well established foreign trade. His efforts in this direction have been spasmodic. When times are hard and the bottom falls out of the domestic market, he shows some interest, but it never extends beyond the export of goods manufactured for the home market. He does not make a study of local conditions nor does he show an inclination to follow the advice of the merchant on the ground. And what is more serious, the confiding Philippine importer who establishes a line of American goods during one of those slack seasons referred to, finds upon the resumption of American prosperity that his orders are ignored and often rejected. These methods have greatly prejudiced local importers against carrying American goods and now when any manufacturer, who is sincere in his purpose, desires to engage permanently in foreign trade, he finds the local importers and dealers lukewarm. This he usually charges to prejudice rather than rightfully to the methods of his predecessors. Again, when the Payne Bill went into effect, not a few American manufacturers in staple lines concluded that foreign competition had been excluded and proceeded to invoice goods at domestic prices, without inquiring into the real status of the trade as affected by the Payne Bill, and altogether neglecting the adjustments made by the foreign manufacturer to preserve his trade.

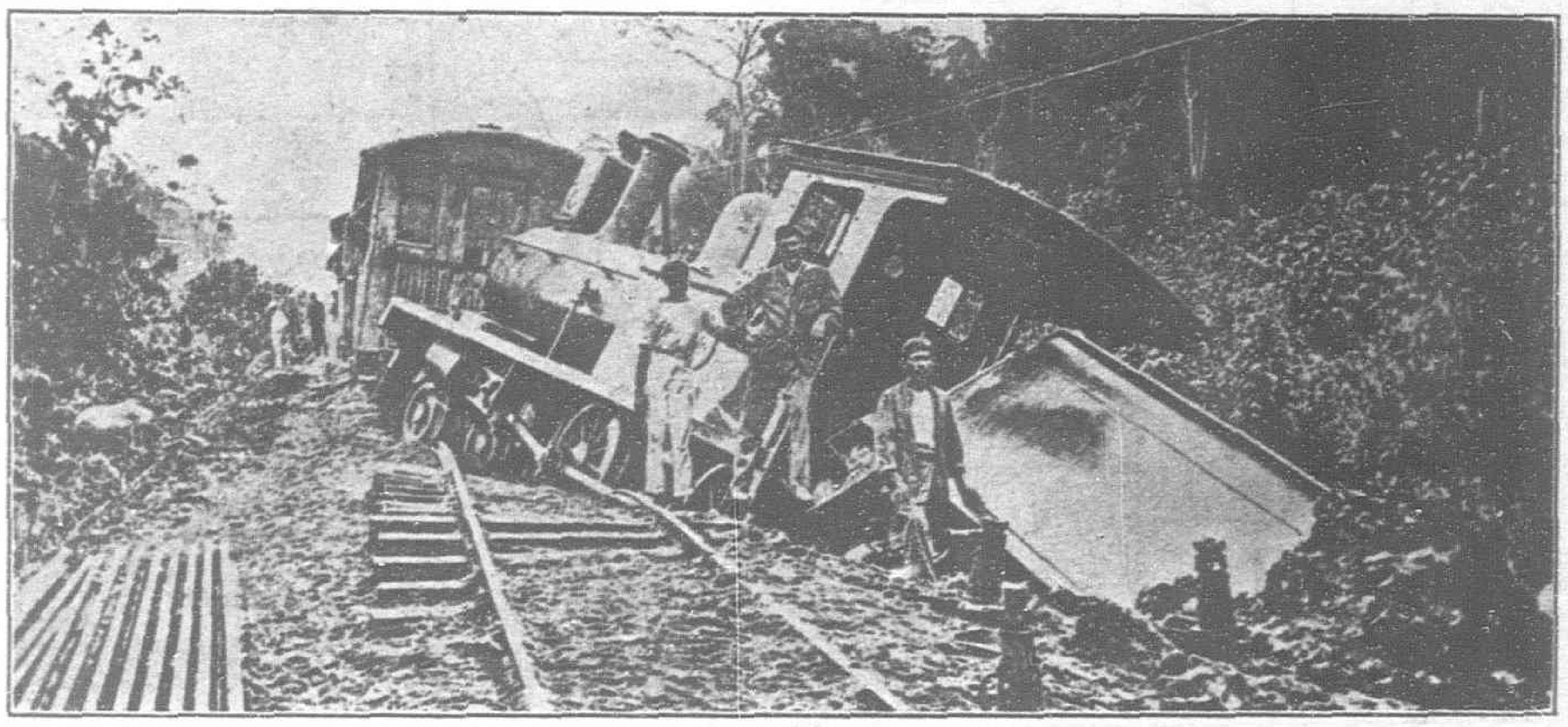
A review of the report of the insular collector, while it sets forth the increased importation of American goods, gives convincing proof how thoroughly the foreign manufacturer had studied the situation and adjusted himself to the new conditions.

THE FEDERATED MALAY STATES RAILWAYS

At the recent meeting of the Federal Council the sum of $5,462,906 (Straits Cur.) for railways, including capital expenditure and $5,206,169 for railway construction, was appropriated for the year 1911 which indicates that the usual activity will continue to feature the extension of the already very comprehensive system of railway intercommunication of the Federated Malay States. At the end of the year 1908 there were 468 miles of open line of which approximately 40 miles were opened to traffic during that year. These lines included the main line of 352 miles approximately connecting Prai in the province of Wellesley with Gemas on the Johore State boundary, the last section on the main line between Tampin and Gemas, a distance of over 32 miles, having been opened in October 1906. The branches up to that time represented approximately 116 miles, the Seremban-Dickson branch of 24 miles and the Ipoh-Tronoh of 15 miles, approximately, having been opened to traffic in July and October, 1908, respectively.

The total for construction and surveys of new lines for the year 1908 amounted in all to $5,196,969.26, of which $3,050,457 were expended on the Johore State Railway and wagon ferry at Johor Bharu to connect with the Singapore Kranji Railway. The Johore State Railway, which now forms the connecting link between Singapore and the F. M. S. Railway at the Johore State boundary, is 120.5 miles in length and, according to the 1908 report, permanent way had been linked during that year and construction which had been started on the southern end in December 1904 and on the Northern in March, 1905, was well under way. The Gemas-Segamat section of 16 miles was open for traffic in March, 1908, and two other sections covering 54 miles were also completed, making in all but 50.5 miles remaining incomplete.

In July, 1909, through traffic from Singapore over the Johore State Railway and the F. M. S. Railways was established and the wagon ferry across the Johore State put in commission in December, 1909. Since that date, with the exception of serious damage by floods in March, it has been in continuous operation.



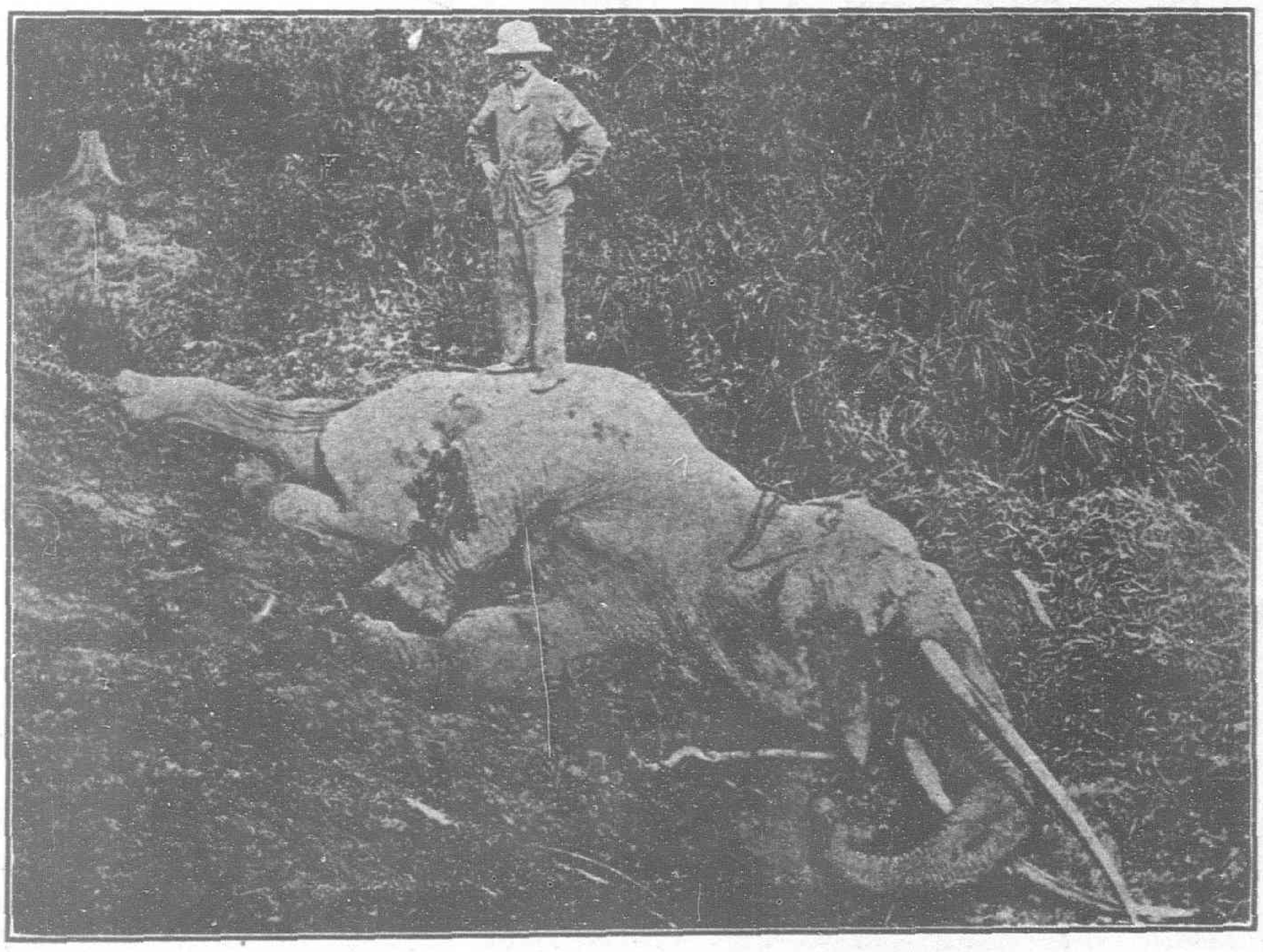
From Official Reports.

TRAIN IN F. M. S. DERAILED BY COLLISION WITH WILD ELEPHANT

The Ipoh-Tronoh branch of 15 miles previously referred to now taps the Tronoh Tin Mines.

The East States Trunk line northward from Gemas is the proposed line which will ultimately connect witht he proposed Peninsular Railway from Bangkok provided for in the recent Anglo-Siamese treaty. The first section is 76 miles in length connecting Gemas with Kuala Semantan. The survey of this section was commenced in March, 1906, and completed in April, 1907. Sanction of construction was given in July, 1907. On this section there are 338 bridges and the line deviates at the 62nd mile to avoid danger from the flood water of the Pahang River. Last month the earthwork on this section was reported completed to the Kuala Semantan end and the rail head was within nine miles of that point.

A branch 13 miles in length was also completed connecting Kuala Pilah with Bahua, a station on the Gemas-Kuala Semantan section about 23 miles north of Gemas.

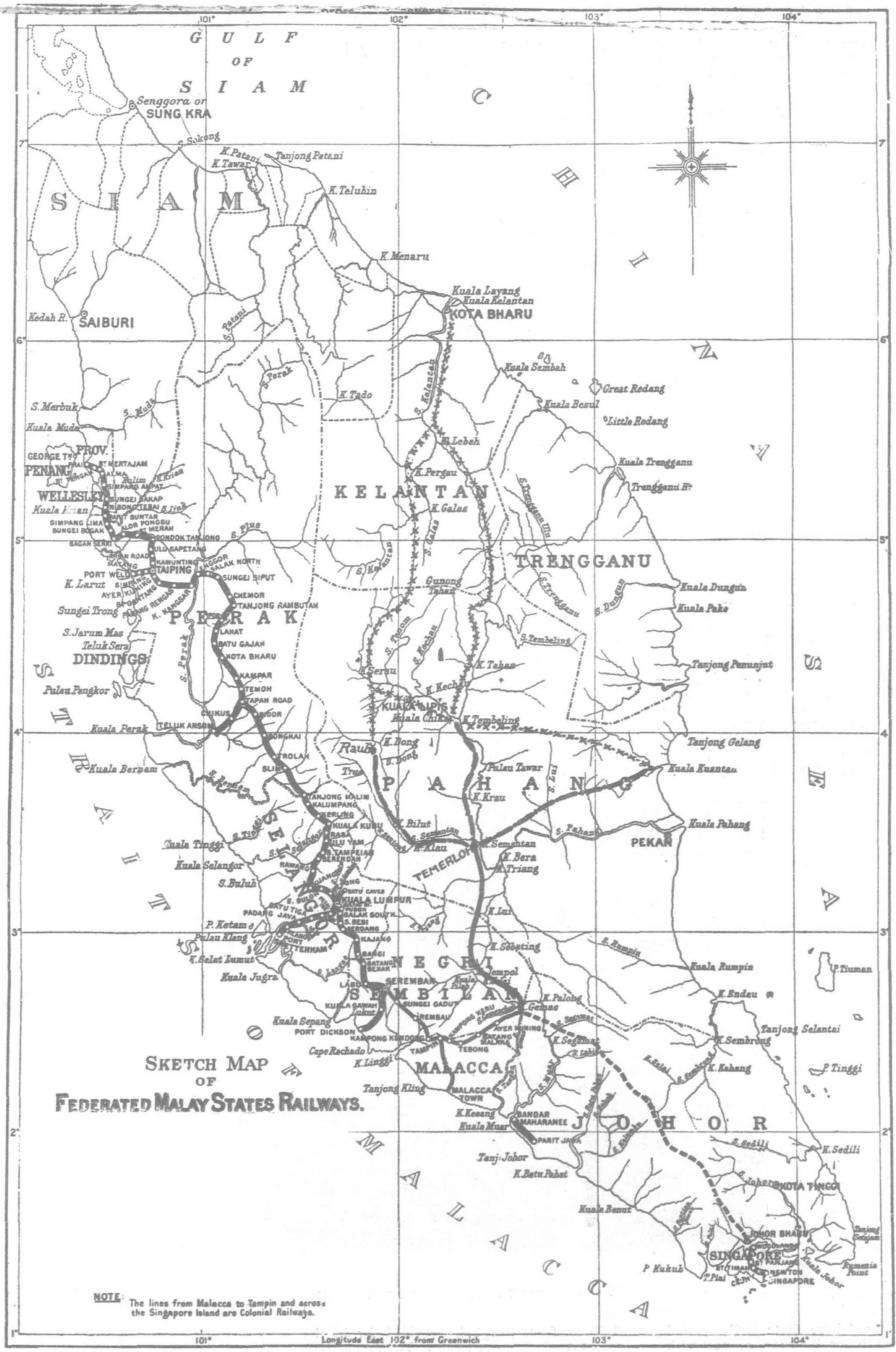


From Official Reports.

THE ELEPHANT THAT CAUSED THE TROUBLE

The extension of the permanent survey of the East States Trunk has been carried northward to the Pahang-Kelantan boundary and over one-fifth of the earthwork over a distance of 40 miles beyond the Semantan Jungle has been completed. The preliminary survey brings this line out at Kuala-Kalantan, and it is from this latter section, roughly speaking, that the construction from the British end of the Peninsular Railway will no doubt begin.

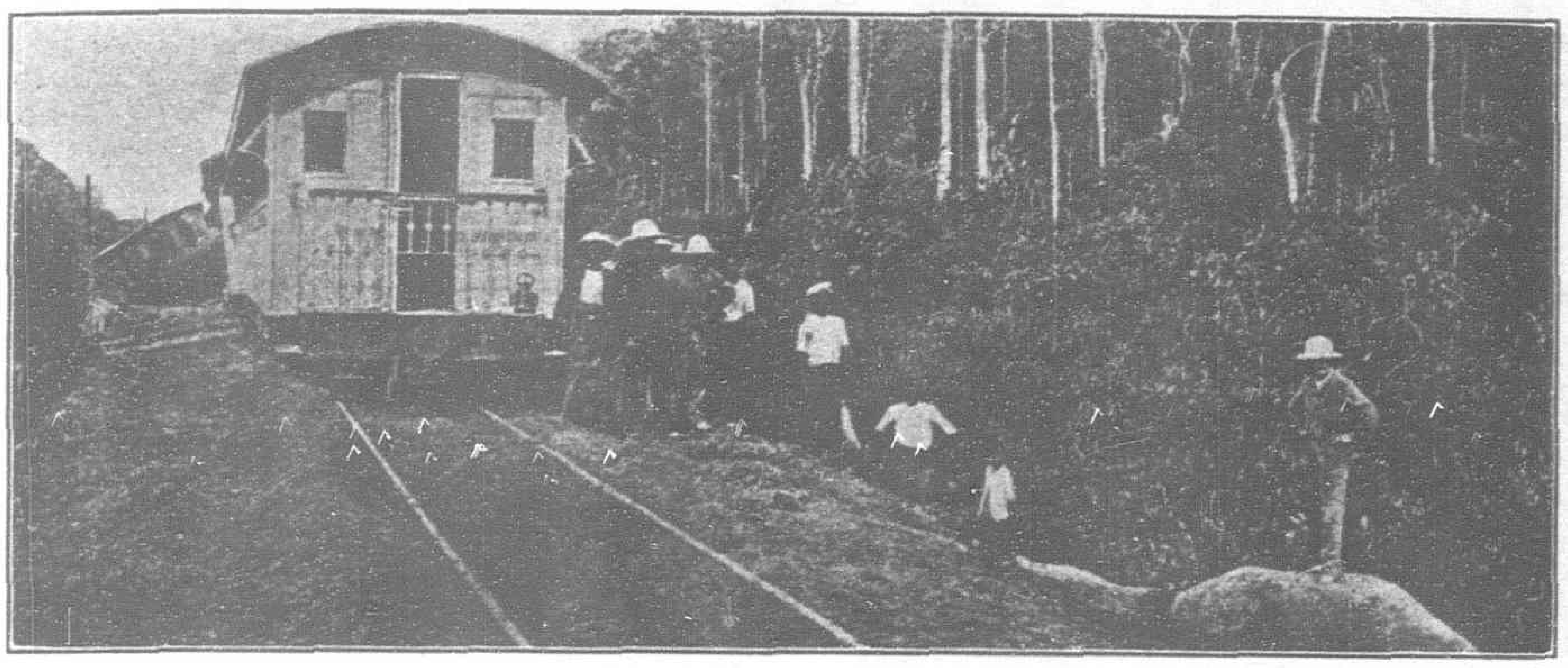
Among the branches proposed is one connecting Ipoh with Gopeng and another connecting Padang Java with Kuala Selangor, the preliminary surveys for the latter having been submitted. The total of capital account up to the end of 1908 amounted to $45,923,430.



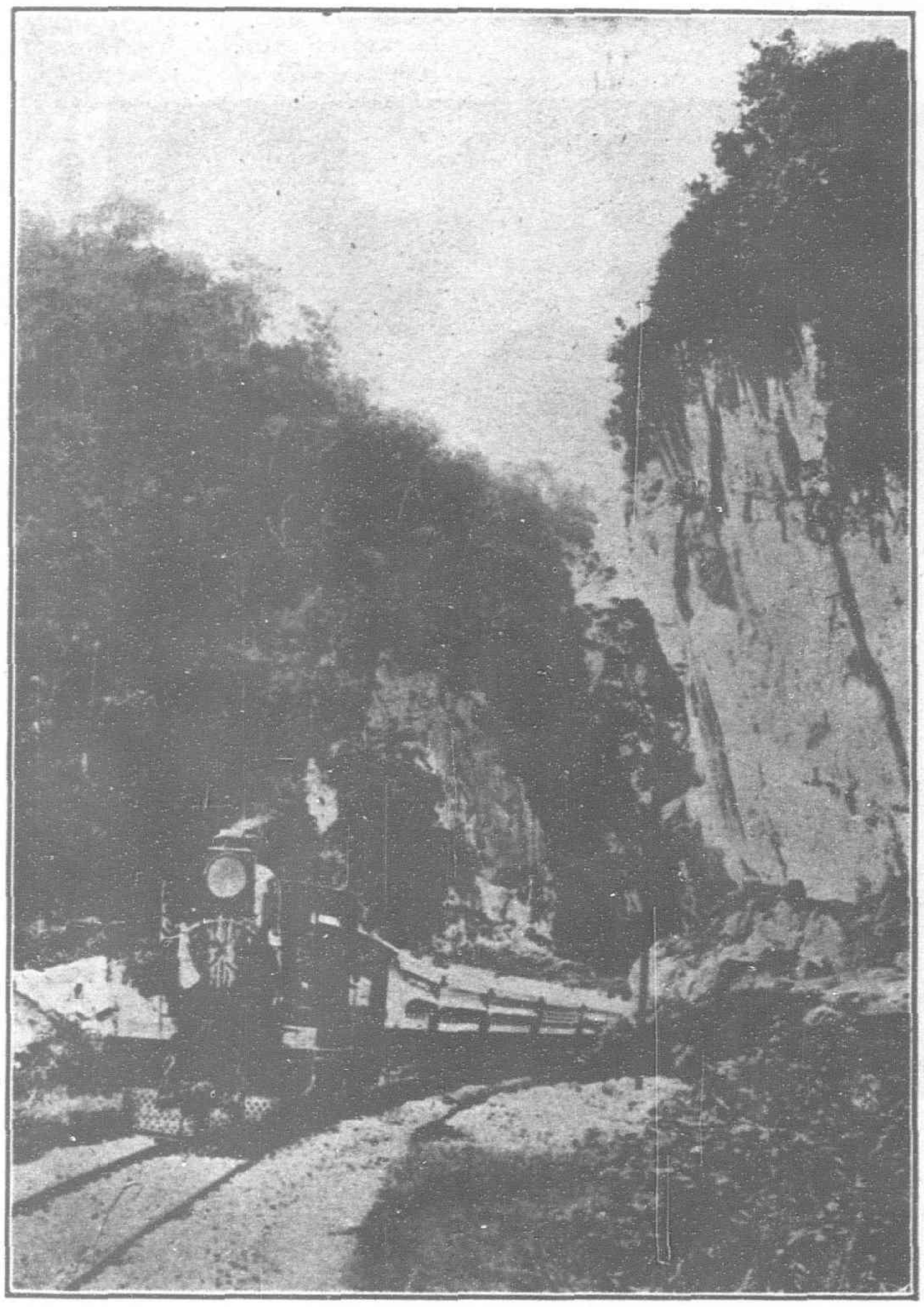
SKETCH MAP OF FEDERATED MALAY STATES RAILWAYS.

NOTE: The lines from Malacca to Tampin and across the Singapore Island are Colonial Railways.

From Official Reports.

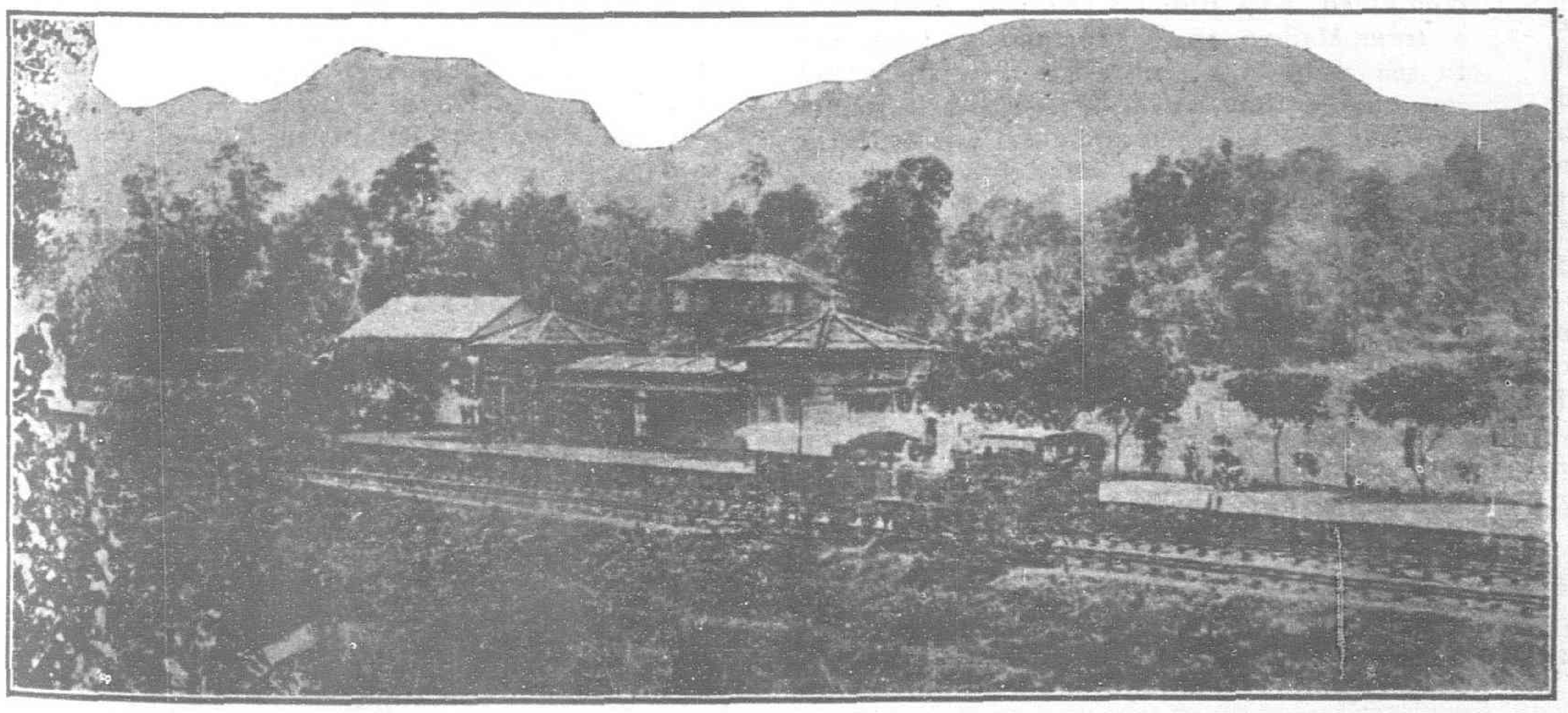


From Official Report. REAR VIEW OF WRECK



From Official Report.

RAILWAY CUT, LIMESTONE CLIFFS, KINTA, F. M. S.



From Official Report. AN ATTRACTIVE ROADSIDE STATION ON THE F. M. S. RAILWAYS.

The receipts for the year from all sources were $5,137,771 and the expenditure $3,457,022, approximately 67% of receipts, leaving a net revenue of $1,680,749.

The report for the year 1909 showed receipts to the amount of $5,377,409. The total expenditure for operation was $3.909,229, leaving a net revenue of $1,468.180. The total capital account at the end of the year was $46,066,565, the net revenue representing 3.18% on capital compared with 3.49% the previous year.

Among the recent innovations of the present year is the construction of a new depot at Kuala Lumpur and the proposal to inaugurate a through night service to Singapore. At the end of the year 1908 the rolling stock comprised 97 locomotives, of which 20 new ones were added during the year, 69 tenders, 17 first class coaches, 22 first and second class combined, 16 second class and 61 second class, 45 third class and brake van composites, all bogies. Besides there were 6 first class, 6 second class, 3 first and second combined, 38 third class, etc., of the four wheeled coaching stock. Of the locomotives Messrs. Kitson & Co. supplied 45, Honslet Engine Co. 21, Dubs & Co. 7, Nasmyth, Wilson & Co. 4, Nelson, Reid & Co. 9, Robert Stephenson & Co. 3, Sharp, Stewart & Co. 2, and the balance scattering. They are of ten different classes ranging from 20.05 ton total weight of engine and tender in working order to 76 tons. Of the largest there were 22.

In connection with this system of railways are a number of motor line feeders that tap the more isolated sections and with the splendid roads built throughout the States this service has been most effective. According to the 1908 report $422,344 represented the total expenditure charged to capital account of which $343,976 represented the cost of motors to that date. The gross receipts for the year amounted to $131,709 and the working expenses including 20% for depreciation, brought the total working account up to $158,582, a net loss of $26,873 as compared with a net profit the previous year of $8,775. When it is understood that the allowance of 20% for depreciation of motors is practically unwarranted owing to the large expenditure for renewals and repairs, it may be seen that the service shows a profit, but it would appear that the railway management is less anxious to have the annual report bristle with profits on paper, than to be very conservatively on the safe side.

In all there are over 150 miles in feeders covered by motor cars the longest motor branch connecting Kuala Kabu in Selangor with Raub in Pahang, a distance of 44 miles, and a branch connecting Kuala Lipis with this line 39 miles in length brings the capital of Pahang within 24 hours of Kuala Lumpur.

The average number of automobiles in operation daily during the year was 13 46, and miles daily per car 53, with average daily receipts of $26 73 per car. The cost of gasoline per mile per car was 83 cents in 1908 and 70.3 in 1907. The average yearly cost of repairs and renewals per car amounted to $1,215.45 in 1908 and $954.65 in 1907. During the year 1908, 202,549 passengers were carried and the car miles numbered 259,178.

The equipment of the motor routes at the end of 19c8 comprised 42 automobiles as follows:

Three 24 h. p. Albion mail cars, four 30-40 h. p. double-decked buses, four 30-40 h. p. bus Chassis, six motor Lorry Chassis, four 28-32 h. p. Chassis, three 30-40 h. p. Straker-Squires, four 16 h. p. Albion wagonettes, eight 18 h. p. Milnes Daimler Chassis, one 16 h. p. Albion Lorry, three 24 h. p. Throneycroft Chassis, and two 16 h. p. Milnes Daimler Chassis.

F. M. S. PUBLIC WORKS

The total appropriated for the Public Works Department of the Federated Malay States for the year, according to the recent supply enactment, amounts to $8,166,374 (Straits Cur.) divided into allotments under the headings: Public Works Department, $1,056,589; Public Works Annually Recurrent, $2,625,325; and Public Works Extraordinary, $4,484,775. This is about $270,000 over the amount expended in 1908. Some idea may be gathered with regard to the working of this department by a short review of the report for the year ended January 1, 1909. On works and buildings alone $2,104,387 were expended during the year. Some idea of the varied character of work under this head may be gathered from the following items:

New Waterworks at Gopeng, Perak, Workshops and other extensions to the Taiping convict establishment, retaining walls to the streets and shop frontages at Bagan Serai and Kuala Karan, schools, officials' quarters and lunatic asylum at Tanjong Rambuntan which is expected completed next year, all these in Perak. Then follows in the State of Selangor, waterworks at Kuala Kubu and Rawang, extension of the water supply at Klang and Kuala Lumpur with addition hospital buildings and the improvement of the head race of the Kuala Lumpur Electric Power Station, etc. Negri Sembilan secured an extension of post office and water supply at Seremban with additions to hospital at Port Dickson and a reading room at Kuala Klawang during that year.

Pahang was supplied with an extension of water drains at Bentong and the water supply at that point was completed, a new wharf at Kuantan, etc.

Official Reports.

WOOD LANDS ROAD, A TYPE CONSTRUCTION IN THE STRAITS SETTLEMENTS UNDER DIRECTION OF THE PUBLIC WORKS DEPARTMENT

It would seem, however, that the most important work under this department is the maintenance and construction of permanent roads. For the year ended December 31, 1908, $4,558,679 were spent in this work. This sum represents approximately the annual amount invested in this important division. The roads are divided into metalled, unmetalled, and bridle paths. Of the first there were 1791 miles in 1908 with 246 miles of unmetalled and 1,403 miles of bridle path, a total in all of 3,440 miles. Besides the maintenance of roads already built the returns for 1908 show 124 miles of metalled road, 51 miles of unmetalled road and 65 miles of bridle path added during the year.

The most important construction in this division is the road under way connecting Kuala Kuantan on the east coast with Kuala Lipis, the capital of Pahang. This road, when completed, will provide the main section of a trans-Malaya roadway running from sea to sea across the peninsula and it is not improbable that Kuala Kuantan will sooner or later be connected up by railway with the East Coast Trunk.

With regard to the Lipis-Kuantan road, it is expected completed in 1913 and the earthwork is expected finished early next year. A vote of $3,000,000 was originally provided for this important construction and up to August this year $1,600,000 had been expended.

On bridges alone $528,305 were spent during the year 1908, the largest of these being the Belfield bridge which has four spans of 140 feet each and cost $260,000.

In his speech at the opening of the Federal Council at Kuala Kangsar last month, H. E. the High Commissioner, referring to public works, said:

"The principal buildings under construction during this year are the Lunatic Asylum at Tanjong Rambutan, which it is expected will be opened in April; the Survey Offices in Kuala Lumpur, which should be completed in December; the Land and Survey Offices, Seremban, already completed; Barracks for the Police and Guides; House for the Judicial Commissioner at Ipoh, and Quarters for various officers and subordinates. The Quarantine Camp at Pulau Jerejak, which is being constructed by the Straits Government for the Federated Malay States, will, it is anticipated, be completed by the end of March.

"Plans have been completed for the Water Supply to the Coast Estates in Selangor, the jungle has been cleared at the head works and everything is in readiness for the pipes which have been ordered from the Crown Agents.

"In 1911 the principal works it is proposed to undertake include a preparatory School for Malays at Kuala Kangsar; a new house for the Resident General at Kuala Lumpur; a Hospital for Ipoh; Police Barracks, Post Office and Public Offices at Tapah; Post Office at Kuala Kangsar; Offices and Quarters in the New Territory; extension of river Embankment, Kuala Lumpur; extension of Waterwoks, Kuala Lumpur; reclamation of Batu Road swamp; and additions to various hospitals.

"The programme of road extension includes roads from Changkat Lobak to Bukit Merah in Krian, Klian Intan to Muda River in Upper Perak, Lahat to Sungei Raia in Kinta, Telok Datoh to Bangi in Ulu Langat, Rantau to Ulu Sawah in Negri Sembilan, and the Kuantan-Benta main road in Pahang with a cart-road to it from Lubok Paku."

CONTRACTING NEWS

BIDS OPENED.—Philippine Bureau of Public Works.—Aquarium: Mr. Harry Thurber, ₱27,050 in 150 days, and Mr. John Gordon, ₱43,000 in 240 days.

PHILIPPINE BUREAU OF SUPPLY.—School supplies.—J. P. Heilbronn & Co. was awarded contract for composition books, scratch pads, wrapping paper and penholders, ₱36,000; Messrs. Erlanger and Galinger secured the contract for blotting paper and acme plate amounting to ₱15,000; Mr. Jack Oppenheimer secured the contract for 4,000 gross Faber pencils amounting to ₱7,880; Messrs. McCullough & Co. secured the contract for blotters and paper tablets. The other bidders were the American Hardware & Plumbing Co., Henry W. Peabody & Co. and Messrs. Wise & Co. Ltd.

PHILIPPINE BUREAU OF PUBLIC WORKS.—Addition to laboratory of the Bureau of Science.—Bids submitted. R. M. Loper, ₱48,300 or ₱53,430 as an alternate bid for extra work; Coleman and Goodman ₱47,030, or an alternate of ₱53,000; Manila Construction Company ₱57,700 or an alternate of ₱62,700; M. Manade ₱97,000, or an alternate of ₱107,000; John Gordon ₱65,750 or an alternate of ₱72,600; and the Manila Saw Mill Company ₱58,950 or an alternate of ₱64,800.

THE SHANGHAI MUNICIPALITY.—*Heating and Cooking Apparatus for hire:*—The Engineer's recommendations in respect to the tenders received in response to Municipal Notification No. 2048 are approved as follows:—

1.—That as delivery of *Radiators* cannot be guaranteed in time for the hire of these before Spring, tenders for these will again be called then, so that they will be in use towards the end of 1911.

2.—That in view of the probable large demand for hire of *Cookers* of which the economy and convenience is certainly to be recognized, 12 of these appliances be ordered instead of 6 and that the lowest tender £185 10s. be accepted. 3—That for the same eight ovens be ordered instead of 4, and the tender of the Shanghai Electric and Asbestos Co. for £107 4s be accepted.

4—That likewise 12 combined ranges and grills, instead of 6, be ordered, and the tender of the Shanghai Electric & Asbestos Co. for £13 18 0 be accepted.

5.—That for *Therol Water Heaters* the tender of Messrs. Jardine, Matheson be accepted for £409 for 10 of these appliances of the larger sizes with accelerators, and for 10 more of a smaller size, including certain spare parts.

The names of the unsuccessful tenderers are as follows, their tenders being in a form which does not admit of the usual published tabulated schedule:—

Messrs. Arnhold Karberg & Co.
F. Henrion.
Melchers & Co.
Samuel, McGregor & Co., Ld.
Scott Harding & Co.
Shewan, Tomes & Co.
Siemens China Electrical Engineering Co.
Siemssen & Co.
Rose, Downs & Thompson.

PROPOSALS INVITED.

BUREAU OF PHILIPPINE CONSTABULARY.—Shoes.—Sealed proposals in triplicate will be received at the office of the Chief Supply Officer, Bureau of Constabulary, Old Oriente Building, Manila, until ten a. m., February 17, 1911, and then opened in the presence of attending bidders, for furnishing the Bureau of Constabulary 10,000 pairs of shoes.

Bids must be accompanied by samples.

Time for delivery to be stated in proposal and to be considered in awarding contract.

Samples may be seen and blank proposals obtained at the office of the Property Officer, Bureau of Constabulary, Old Oriente Building, Manila.

As a guarantee of good faith each proposal must be accompanied by a certified check for ten per cent of bid. Letter of guarantee from bank will be accepted in place of check.

PUTTEES. — Sealed proposals in triplicate, subject to the usual conditions, will be received at the office of the Chief Supply Officer, Bureau of Constabulary, until ten a. m., January 11, 1911, and then opened in the presence of attending bidders, for furnishing the Bureau of Constabulary.

1,000 pairs of puttees, woolen, spiral, for officers.

Bids must be accompanied by samples.

Time for delivery to be stated on proposal and to be considered in awarding contract.

Samples may be seen and blank proposals obtained at the office of the Property Officer, Bureau of Constabulary, Old Oriente Building.

As a guarantee of good faith each proposal will be accompanied by a certified check for ten per cent of bid. Letter of guarantee from bank will be accepted in place of check.

PUBLIC WORKS DEPARTMENT, SYDNEY, NEW SOUTH WALES.—Coal loading plant capable of delivering into ships' holds about 1,000 tons of coal per hour at each side of a new jetty to be erected at Port Kemble, South Coast, N. S. W. Contractors' Room, Public Works Department, Sydney; and office of the Agent General of New South Wales, London. Bids opened January 9th, 1911.

PHILIPPINE PORT WORKS.—Sealed proposals in quadruplicate for the construction of a Causeway, Roadway, Wharf, and Storage Shed at Bais, Negros Oriental, in accordance with the plans and specifications, will be received at this office until 11:00 a. m., January 3, 1911, and then publicly opened.

Plans and specifications may be obtained upon application at the office of the Director of Navigation, Manila, P. I., the Engineer in Charge of Port Works at Iloilo, or the Engineer in Charge of Port Works at Cebu, P. I.

SHANGHAI MUNICIPALITY.—The Council is prepared to receive tenders for the supply of shovels, pickaxes and similar tools, to be delivered on or before March 15, 1911, as follows:—

650	Steel navy shovels with eye handles.
100	Square navvy shovels with eye handles.
220	Pickaxes (heavy).
300	Pickaxe handles.
100	Steel digging spades with eye handles.
25	Transplanting spades.
25	5-inch rivetted Dutch hoes.
25	6-inch ,,
25	16-tooth garden rakes.
25	10-tooth ,,
75	6-inch rivetted garden trowels.

Full particulars and all necessary information may be obtained upon application to the Public Works Department, Hankow Road, where samples may be seen.

Sealed tenders endorsed "Tender for Tools" will be received by the undersigned not later than 5 p m. on Friday, December 30.

The Council is prepared to receive tenders for the supply and delivery on or before June 30, 1911, of the following materials for uniforms, etc., in the undermentioned quantities:—

1,000	prs. British Army Pattern Ankle Boots.
100	yds. Blue Beaver cloth, No. 1 quality.
25	yds. Blue Beaver cloth, No. 2 quality.
2,000	yds. Blue Beaver cloth, No. 3 quality.
3,800	yds. Indigo Blue Serge.
900	yds. Khaki Woollen Serge.
2,600	yds. Grey Cotton Lining.
200	Light Gabardine Raincoats, khaki.
200	Constables' Blue Cloth Capes
50	prs. Blankets, white, 63-in. by 80-in., 6-lb.
100	prs. Blankets, brown army, 68-in. by 90-in., 10-lb.

Samples and patterns and other requisite information may be obtained on application at the Police Store, Gordon Road Depot.

Sealed tenders endorsed "Tender for Uniform Materials" will be received by the undersigned not later than noon on Thursday, January 12, 1911. Tenders for each item will be considered separately.

PROPOSALS FOR FRESH VEGETABLES.—Headquarters Philippines Division, Office Chief Commissary, Manila, P. I., December 15, 1910. Sealed proposals in triplicate, subject to usual conditions, will be received at this office until 11 o'clock a. m., February 1, 1911, at which time and place they will be opened in the presence of attending bidders for furnishing and delivering to the Subsistence Department, U. S. Army, Manila, P. I., such quantities of fresh potatoes and onions as may be required from time to time during period from March 1, to June 30, 1911. About 600,000 pounds potatoes and 120,000 pounds onions will be required per month. Each proposal must be accompanied with a bidder's guaranty in the amount of $5,000.00 or with certified check for that amount on a bank of approved standing in Manila. The bidder to whom award is made will be required to give bond, the penalty of which will be fixed by the Chief Commissary. Blank forms, specifications and all necessary information can be obtained on application to this office. Envelopes containing proposals should be marked "Proposals for Fresh Vegetables to be opened February 1, 1911," and addressed to the undersigned.—D. L. Brainard, Lieut. Col., D. C. G. Army, Chief Com'y.

Sealed proposals in triplicate, subject to the usual conditions, will be received at the office of the Chief Supply Officer, Bureau of Constabulary, Old Oriente Building, Manila, until ten a. m., April 10, 1911, and then opened in the presence of attending bidders, for furnishing the Bureau of Constabulary

35,000 pairs of cotton socks.

Blank proposals may be obtained at the office of the Property Officer, Bureau of Constabulary, Old Oriente Building, Manila.

Sealed proposals in triplicate will be received at this office up to 11 a. m. December 22nd, 1910, when they will be opened in the presence of the attending bidders, for furnishing ENGINE and CYLINDER OILS for the period from January 1st, 1911, to June 30th, 1911.

Proper forms and specifications may be had on application to this office. Wm. T. Nolting, Acting Purchasing Agent.

PROPOSALS FOR INTER-ISLAND TRANSPORT: Headquarters Philippines Division Office of Chief Quartermaster, Manila, P. I. November 28th, 1910. Sealed proposals, in triplicate, subject to the usual conditions, for furnishing this Department with one Ocean Going Steamer, suitable for Inter-Island Traffic, will be received here until 11:00 A. M., February 8th, 1911, and then publicly opened. Information and blank forms furnished upon application. F. G. Hodgson, Assistant Quartermaster General, U. S. Army. Chief Quartermaster.

PHILIPPINE MINING NEWS

NUEVA ECIJA DEVELOPMENT.—Philippine mining circles are greatly interested in the activity of Australian capitalists in the placer fields of this province. Recently Mr. Begg, representing capital to the amount of £100,000 arrived from Sydney to expert the ground of the Rio Chico Gold Dredge and Mining Company whose holdings cover over 1,000 acres on the Rio Chico and Rio Cabu.

It is also understood that another Australian group are negotiating for other properties on the Cabu and it is expected that a dredge will soon be ordered.

About 2,000 hectares in all have been bored in this field and tests ranging from eighteen cents gold to fifty-two cents gold have been realized on preliminary boring, and also demonstrating that a large percentage of the ground is sufficiently attractive to warrant more complete investigation and development. Some of the ground has been thoroughly tested under option and while no official statement has been given out, we are informed that a dredge has been contracted for which would indicate that the preliminary report has been confirmed.

The Nueva Ecija prospectors are benefiting from the experience of older districts and are proceeding more intelligently and conservatively in developing their properties. Working agreements whereby the owners receive a percentage of net returns seem to be more popular with the owners of the ground than a transfer of property for a percentage of stock. As one prospector put it:

"We are making the 'ante' as small as possible for the mining companies. We are ready to give them exclusive rights to work our ground and take a percentage of net returns for our share The company interested simply backs its judgment after thoroughly investigating to the extent of the dredge and reaps a reward commensurate with its enterprise and judgment. This arrangement reduces the amount of capital required if purchase of land were involved and gives the owner participation in profits at a fixed ratio. Returns will thus be regulated by values and fairly divided. If the ground proves worthless through some drawback unforeseen, the company is free to abandon the project without being burdened with valueless property. There have been some reports in circulation that owners of Philippine mining ground have discouraged investment by asking excessive prices for their rights. This is not true in Nueva Ecija. We let the fences down to capital and are ready to take a reasonable share of the net values as our portion."

It is understood that the Cabu Mining Company has concluded arrangements for the installation of machinery on their property on the upper Cabu.

THE PARACALE DISTRICT.—The new dredge ordered by the Gumaus is expected installed by August, 1911, on the company's property in this district.

Last month 73 ounces of gold were received at Manila from the Philippine company's dredge representing eleven days' saving.

The examination of the Paracale Extension property by Mr. R. V. Hanlon, a mining engineer recently arrived from Korea, has been in progress with a view to securing a final report on the property preparatory to active development. This ground was formerly experted by Mr. Kane whose report placed the average values at ₱1.05. It is understood that plans for a dredge have already been completed by two Australian experts familiar with conditions in the district and that if Mr. Hanlon's report is favorable its construction will be promptly undertaken and the machinery installed by the end of 1911.

The Paracale Gold Dredging Company's stamp mill, recently arrived to handle the rich boulders found on the ground, will be in operation in January. The installation of a second dredge is being considered by this company.

THE BENGUET DISTRICT.—The Benguet Consolidated reports 130 ounces for November. The installation of the Headquarters plant is progressing and development work continues.

The opening of two good leads on the Bonanza which lies east of the Headwaters is reported.

THE GOVERNMENT COAL MINES.—In his report, Secretary Dickinson has recommended that an additional appropriation be made for the purpose of continuing the development of these deposits.

THE BATAN COAL MINES.—The installation of two of the new coal cutters has been effected and by January four will be operating, increasing the capacity to 300 tons a day. A new system of chamber mining has been introduced.

COAL IN MOROLAND.—Reports from Zamboanga are to the effect that a deposit of coal has been discovered near Margosatubig.

THE SAN MAURICIO MINE.—The mill was shut down early this month on account of the flooding of the lower levels following the heavy rains. Mr. Ripley, who is in charge of the Manila offices, stated that the season's torrential rains which have fallen this year at Mambulao have proved too much for the boiler capacity of the plant. The lower level is flooded and is draining off through the tunnel at the first level.

A shipment of 70 tons of concentrates valued at $3,500 gold has gone forward and a shipment of 65 tons is on the way from the mine. One hundred and twenty five ounces of bullion were also realized up to the date of the flooding, with the mill running very irregularly during November.

FAR EASTERN RAILWAY NEWS

THE CANTON-HANKOW RAILWAY.—A correspondent of the *North China Daily News* gives an account of his trip over this line to the railhead from Canton for a distance of 58 miles. The fare for the trip was Tls. 2 first class and the speed did not exceed 20 miles an hour. Of the construction and prospect of the line extension, he writes:

"Many sections of the line above what is opened have been worked on, and it was said that the hope is entertained that the line will be opened as far as Yingtak city, sometime about the beginning of 1912. There are more engineering difficulties encountered farther on, and these are considerable in the mountain gorge, known locally as 'The Blind Boy's Pass.' But these are being overcome. Still sometime must elapse before the line is opened as far as Yingtak, and longer still before it reaches Shiuchou city, and beyond this, we believe, nothing further has been done, or even seriously contemplated. At the rate things are going, some years must pass before the line is laid through the range of mountains which separates the Kuangtung province from the province of Hunan. Some of us will be greyer still before we can get from Canton to Peking by rail, and the run, at least in the south, will not be one to be undertaken without a generous willingness to meet sundry inconveniences."

JAPANESE LIGHT RAILWAYS.—Charters have been granted the following light railways to be operated by steam power:

The Uwonuma Railway (between Mitsuji and Kakegawa)—Length, 8 miles; steam power; capital, 200,000 yen.

The Tomo Railway (between Tomo and Fukayama)—Length, 7 miles; steam power; capital, 200,000 yen.

The Chugoku Railway (between Harakoi-sai-inari and Kakegawa)—Length, 1 mile; steam power; capital, 75,000 yen.

The Mimasaka Railway (between Tsuyama and Emi)—Length, 16 miles; steam power; capital, 800,000 yen.

The Awa Railway (between Tokushima and Komatsushima)—Length, 7 miles; steam power; capital. 650,000 yen.

The Kada Railway (between Wakayama and Kada)—Length, 5 miles; steam power; capital, 650,000 yen.

The Ise Railway (between Tsu and Yokkaichi)—Length, 21 miles; steam power; capital, 500,000 yen.

The Chiba Railway (between Narita and Tako, and Kashiwa and Noda)—Length, 13 and 9 miles; steam power; capital, 410,000 yen.

The Yoshino Railway (between Yoshinoguchi and Kitada)—Length, 7 miles; steam power; capital, 200,000 yen.

The Railway Board is now considering the following applications:

The Nose Myoken Railway (between Ikeda and Yoshikawa)—Length, 10 miles; steam power; capital, 500,000 yen.

The Hanbi Railway (between Emi and Kamigori)—Length, 16 miles; steam power; capital, 200,000 yen.

The Chuwo Railway (between Kawaguchi and Iwatsuki)—Length, 13 miles; steam power; capital, 800,000 yen.

The Shimotsui Railway (between Shimotsui and Chayamachi)—Length, 12 miles; steam power; capital, 300.000 yen.

The Ikomayana Railway (between Osaka and Nara, between Yokkaichi and Komono and between Ihara and Kasaoka)—Total length, 52 miles; steam power; capital, 2,050,000 yen.

BURMA RAILWAYS.—The receipts for the half year amounted to Rs. 41, 34, 395, an increase over the corresponding term in 1909 of Rs. 42,392.

CHINESE SECTION OF THE KOWLOON-CANTON RAILWAY.—The opening of the first section of 30 miles from Canton to Tong Mei was celebrated, December 5, by an excursion over the line. A special train of two combination first and second class coaches, four third class and two third class and van combined. A 101-ton locomotive purchased from the North British Locomotive Works, Ltd., pulled the train to the railhead slightly under one hour's running on the outward trip and 40 miles an hour on the return. A luncheon was served at the Tai Sha Ton terminus. The guests included the leading British and Chinese officials and speeches were made by Taotai Sha., H. E. Chao, the managing director, Mr. Frank Grove, chief engineer, Mr. J. W. Jameson, C. M. G., British Consul General, H. E. Wai Han, the late director general, Mr. John Johnstone representing the British and Chinese Corporation and the Hon. H. E. Pollock, K. C., in the absence of Mr. L. A. Bergholtz, American Consul General. In the evening Chief Engineer Groves entertained to dinner.

The construction of the Chinese section was begun in 1908 and, according to the best expert opinion, will be completed and in operation by July 1, 1911. Rails have been laid from the British end at Lo Wu and also from Tong Mei while construction work is in progress on the two remaining sections. The bridging of the East River Valley offers the greatest difficulty, but the material is already on the ground and construction under way. There are three spans of 224 feet each and two of 60 feet each. The length of the Chinese Section is 87 miles.

THE STANDARD GAUGE IN JAPAN.—The discussion over the widening of the railway gauge in Japan continues and the opponents to the measure point to the condition of finances as a reason for the postponement of the project. However, last month the cabinet decided upon the early realization of the plan in principle and favored the early reconstruction of the Tokyo-Shimonoseki line and it is not improbable that the work will be completed simultaneously with the Antung-Mukden and the standard gauge would prevail throughout.

The original plan was to spread this work over a period of thirteen years at the rate of 10,000,000 yen annually, but the sentiment in favor of speedy reconstruction will no doubt prevail.

THE KIRIN-CHANGCHUN RAILWAY.—A report from Mukden is to the effect that the rails have been laid seven miles from Changchun towards Kolunchieh, the end of the first section, and work is progressing rapidly with a view to opening the entire section to traffic by the first of the year.

THE HEILUNGCHANG RAILWAY.—Viceroy Hsi-liang has announced his approval of the selection of Tiehling as the western terminus of the line on account of the proximity of Tiehling to the Liao River and the advantage of water transportation from that point. The alternative of Kaiyun, which is situated about 18 miles from the Liao, is turned down by the Viceroy for the reason that the line would become a feeder of the South Manchuria Railway and would divert the traffic from Yinkou to Dairen.

KOREAN RAILWAY NEWS.—The new railway station at Fusan, constructed at a cost of Yen 300,000, was completed last month. Light railways between Masan and Mokpo, Wonsan and Hombeung, and Chongjin and Hoilyong are projected and plans and estimates are being prepared.

FORMOSAN RAILWAY.—The following excerpt is from the report of the Governor-General of Formosa:

"The principal organs of land communication are the Government railways, private railways of the sugar refinery company and other light railways. The Government railways which are opened to traffic are 248 miles between Kilung and Takuo, 13 miles 7 chains between Daito-tei and Tamsui, 10 miles 6 chains between Takuo and Kyukyokudo and a part of the Arisan railway which was opened to traffic on Oct. 1st, its mileage being 9

FAR EASTERN ENGINEERING, CONSTRUCTION, COMMERCIAL AND FINANCIAL NEWS

miles 8 chains. The Taito light railways are 34 miles 5 chains between Karenko and Basshisho and 32 miles 2 chains between Shinkaien and Hinan so that the total mileage is 348 miles 5 chains. Private railways worked by steam power in the year 1907 there were only 19 miles 5 chains, but the mileage has suddenly increased and at present the total mileage reaches 446 miles and 3 chains, and when the mileage of those lines applied for is included the total mileage will run up to 623 miles 4 chains. The line is intended for the purpose of collecting the material for sugar and for the purpose of the conveyance of goods. With the increase of the emigrants and the development of industry there is every tendency for the increase of the mileage. The total number of rolling stock needed for sugar manufacturing purposes is at present 55 engines, 43 passenger cars, 8 vans, and 3796 freight cars. The hand pushing light railway was first built at a time of the occupation of the island by our military department for the purpose of the conveyance of military goods but since then it has been allowed to be used for the benefit of the public. At present the total mileage of this railway numbers 177 miles 9 chains and the number of rolling stock is 2538. Besides there are 55 miles 3 chains of unfinished lines and 8 miles 4 chains of the lines for which applications have been made. The total capital needed for the management is 504,000 yen. These lines are all managed by either companies or associations. These cars are pushed by coolies, and freight cars are but poorly constructed though the economic and public interests given by these lines are quite numerous. These freight cars compared with the usual mode of conveyance adopted by the natives are, however, more or less effective and the fare is comparatively lower, while the speed is quite large. The dividend of these companies ranges from 10% to 20% annually and since there is every prospect of increase it goes without dispute that they will be useful in the economic development of the island."

Supply of Railway Material.—Messrs. The Weldless Steel Tube Company, Limited, Birmingham, have an order from the Burma Railways for the supply of steel ferrules and the Vulcan Foundry Company for locomotive spares and duplicate parts. Messrs. Jas. Reid and Company, Limited, England, are supplying the South Indian Railway Company with steel fish-bolts and nuts for 50lb. steel metre gauge rails and Messrs. Horton and Company, Limited, with steel fish-bolts and nuts for 41¼lb. rails. Messrs. Blockow, Vaughan and Company, Limited, had a large order for the supply of angle steel fishplates for 41lb. rails to the South Indian Railway; Messrs. G. Cooper and Sons, Limited, Sheffield, for dog-spikes; and Messrs. Guest, Keen and Nettlefolds, Limited, London and Birmingham, for bearing plates for timber sleepers. Messrs. Burn and Company, Howrah, have an order from the East Indian Railway Company for supplying iron and steel work complete with columns, trusses, etc., for ten goods sheds on the H. K. section; supplying and erecting iron and steel work for 63,000 square feet open shed for the new Howrah station; and iron and steel work for six third class waiting sheds at various railway stations on the Hooghly-Kawata Branch. They are also supplying to the North-Western Railway the iron and steel work for a large goods shed at Badami Bagh; and to the Bengal-Nagpur Railway and Oudh and Rohilkhand Railway a large quantity of 6 feet 60 feet girders, besides undertaking to supply on order a locomotive for a privately-owned Light Railway Company. Messrs. Hurst, Nelson and Company, Limited, Glasgow Rolling Stock and Plant Works, Motherwell, N.B., are supplying the steel underframes and ironwork, etc., for 66 covered goods bogie wagons and 50 open goods bogie wagons to the Bengal-Nagpur Railway for their narrow 2 feet 6 inch gauge extensions. Messrs. Stapleford and Company, Limited, have an order for the supply of the underframes and bogies, etc., for eight composite 1st and 2nd class carriages, five intermediate and third class carriages and eighteen 3rd class carriages for these extensions. Messrs. Orenstein and Arthur Coppel have in hand at present an order for a locomotive 50 h.p. for coal and liquid fuel together with a number of heavy iron box wagons for a stone quarry; one mile of track with a number of wagons and switches for railway construction work; 1¾ mile track with 25 wagons for one of the biggest sugar factories out here and 40,000 dog-spikes for B.G. section rails ordered by two of our State Railways. Messrs. W. Bain and Company, Limited, England, have a large order for the supply of "Dacoit" fencing materials to the East Indian Railway; and Messrs. Verity's Limited, London, for the supply of a large quantity of electric lamp and fan fittings. Messrs. J. Pain and Sons, Limited, England, have just supplied 5,000 fog signals to the East Indian Railway; Messrs. J. Reid and Company, Limited, 72,000 enamelled labels; and the British Westinghouse Engineering and Manufacturing Company, Limited, London, six voltmeters for the Electrical Department of this Railway.—*Railways and Shipping*.

The Fukien Railway Co.—The Amoy correspondent of the *China Mail* refers to a meeting of directors to consider plans for a change of route and writes:

"In consequence of the almost prohibitive cost of bridging the North River so far down as the present stone bridge, commonly known as the 'Pholam Bridge,' but more correctly as the Kang Tang Kio, which is the nearest and most natural route to the city of Chang Chow Fu, it is now suggested to take the line along the northern bank of the North River as far up as the town of Pholam, and then to build a bridge across the river at that point, curving round southwards to the city of Chang Chow Fu. It would of course make the distance from Amoy to Chang Chow Fu considerably longer, but it would tap two most lucrative sources of income, the very large North River area at a much more accessible point. and the extensive Tio Thoa, or Chang Ta, County. It would require two smaller bridges, as well as the bridge across the North River, one over the Tio Thoa river, and one over a smaller tributary, both of which enter the North River from the northern bank. But probably the total cost of the three bridges would be much less than the estimated cost of the bridge originally proposed nearer the mouth of the river. Undoubtedly such a modification of the scheme would bring a much larger revenue than the first proposal, but I should fancy the Chang Chow people would much prefer the original scheme, since it will of course take a much longer time to get to Amoy if the railway runs round via Pholam. It will mean the adding of rather over twenty miles to the distance."

Canadian Pacific Railway Activity.—An annual report of the Canadian Pacific Railway shows sales of agricultural lands during the year ended June 30, 1910, aggregating 975,030 acres for $14,468,564, being an average of $14.84 per acre, according to U. S. Consular reports. Irrigated land brought $26.59 per acre, so that the average of the balance was $12.78. The company will spend $8,500,000 on the eastern section of the irrigation block to provide water, the work to extend over three years.

The number of passengers carried was 11,172,891, as against 9,784,450 the year previous. Tons of freight carried jumped in a year from 16,549,610 to 20,551,868. The system, with its varied activities, railways, steamships, hotels, elevators, workshops, lands, town sites, and irrigation works, represents an investment of $526,250,289, in addition to 12,000,000 acres of land in Manitoba, Saskatchewan, Alberta, and British Columbia. The railway and its equipment represents $317,226,265 of this amount.

The Hangchow-Ningpo Railway.—Tidewater bridges at Hangchow and Pahkuan are the most difficult features of construction on this line, but progress is reported. A large force is engaged working from the Ningpo end toward Yu yao and the work of grading is progressing on the other end of the line. It is not probable that the end of 1911 the line will be operating with a ferry making connections across the Chin-Tang river.

ELECTRIC RAILWAYS, LIGHT, POWER, TELEPHONES, TELEGRAPHS, AEROPLANES, ETC.

Electric Supplies in Manchuria.—U. S. Consul Roger S. Greene, of Harbin, writes:

"The Chinese are at present much interested in electric-lighting enterprises for their principal cities. There is one in operation at Kirin City, an American company having just made a contract with the taotai of Changchun for the installation of a lighting plant there, and the authorities of Heilungchiang are now asking proposals for machinery to be installed at Tsitsihar, the provincial capital, capable of operating 5,000 lights, and lighting equipment for 3,000 lights to begin with. Tsitsihar is supposed to have about 50,000 inhabitants. It is not now of great commercial importance, but when the Chinchou-Aigun Railway is built it is likely to become a flourishing trade center.

"There are in the Valleys of the Sungary and its tributaries in the western parts of Heilungchiang Province a number of new and growing towns—Hulan, Suihwafu, Tunkun, Hailun, Bayanchou, etc.--which have a promising future, as they are situated in a very fertile region, and some of them are easily accessible by water in the summer. Most of them are larger than Tsitsihar. A railroad is projected to connect several of these towns with the Chinese Eastern Railway near Harbin. In Kirin Province also there are a number of promising towns which might be induced to purchase small lighting plants or telephone systems, as, for example, Shuanchenpu, Ashiho, Ninguta, etc. In none of these places can anything be done on a very great scale as yet, and the negotiations, even where there is real business in sight, are likely to be long and trying, but for those who intend to enter the field seriously the effort ought to be worth while.

"In Harbin, the only important European settlement in Manchuria, there is no central lighting system, but there are 15 or more private plants, many of which sell light to their neighbors. As soon as the settlement is organized the question of establishing a central electric lighting plant, street railways, and probably a new telephone system, will come up. There is now an inadequate telephone system here operated by the railway company. The annual subscription for one instrument comes to about $60. Electric light costs from 13 to 16 cents per kilowatt hour, charges having been considerably reduced lately on account of the installation of a new plant. The population of Harbin is estimated at about 60,000 to 75,000.

"There are agents of European companies here, who carry ordinary small electrical supplies in stock. Other stores also carry European electrical supplies. These people have hitherto done little business with the Chinese, their efforts being mainly devoted to the European.

Philippine Wireless.—The work of the wireless telegraph board has been completed and its recommendations forwarded to Washington. The principal high power stations will be established at Manila, Corregidor, Olongapo, Iloilo, Cebu and Zamboanga and smaller stations will connect up every section in the archipelago. The high power stations will have a radius sufficient to connect up with China and Japan and probably the Straits Settlements.

SARAWAK-SINGAPORE CABLE.—The survey of a cable route was undertaken in October by the "Magnet," the cableship of the Eastern Australasian and China Telegraph Co., to connect up those two points.

KOREAN ELECTRIC LINES.—Plans are under way to connect Seoul and Chemulpo with an electric line and construction has been ordered begun on an electric line between Lanan and Chongjin.

FOOCHOW ELECTRIC LIGHT.—Representatives of British, American, German and Japanese firms have been competing for the contract to instal a plant for the new company recently organized.

SHANGHAI MUNICIPALITY ELECTRICAL SUPPLIES.—According to the *Municipal Gazette* the following indents were approved for dispatch to the London Agents:

Firm	*Article*	*Cost.*
Bullers Ld.	Insulators and pliers	£29
L. Scott & Co., Ld.	Vacuum Gauges	2
A. Wright & Co.	Gauges and thermometers	10
Ferranti Ld.	Insulating material	10
Buck & Hickman	Tools, etc.	22
Brit. Electric Transformer Co., Ltd.	Repairs to Transformers	20
The Library Bureau, Ld.	Correspondence files and accessories	42
do.	Ledger desk and accessories	56
The Addressograph Co., Ld.	Addressograph and accessories	85
Kenrick & Jefferson	"Multigrip" current Binders and Renewal leaves	37

ELECTRIC PLANT FOR CORREGIDOR.—The Secretary of War has recommended an appropriation of $150,000 gold for this installation to provide current for electric light for illumination, searchlights and power for wireless.

JAPANESE ELECTRIC RAILWAYS.—The following charters have been granted:

The Chita Railway (between Atsuta and Tokoname)—Length, 19 miles; electric power; capital, 700,000 yen.

The Hachi-Hei Railway (between Hiratsuka and Hachioji)—Length, 24 miles; electric power; capital, 300,000 yen.

The Echizen Railway) between Fukui and Ono)—Length, 21 miles; electric power; capital, 430,000 yen

The following applications are under investigation:

The Himeji Railway (between Himeji and Yamazaki)—Length, 17 miles; electric power; capital, 750,000 yen.

The Yamazaki Railway (between Hashizaki and Yamazaki)—Length, 11 miles; electric power; capital, 500,000 yen.

The Sangu Railway (between Nagoya and Uji)—Length, 65 miles; electric power; capital, 12,000,000 yen.

AEROPLANES FOR JAPAN.—A machine of the Lebaudy type has been secured by the Japanese Investigation Committee through the Mitsui Bussan Kaisha and two additional machines have been ordered from Europe. This will make four under investigation besides the local inventions.

THE EASTERN EXTENSION TELEGRAPH CO. The report for the half year shows gross receipts £345,000 over the corresponding period, 1909, and the net receipts £171,000, the working expenses showing a decrease of £4,600. A dividend of 5% for the term was paid, £50,000 carried to reserve and £72,760 carried forward.

THE EASTERN TELEGRAPH CO., LTD.—The gross receipts for the half year amounted to £664,500, an increase of £71,900 over the corresponding terms, 1909 the total expenditure was £283,800 and increase £4,900. £175,000 were carried to general reserve and £60,000 carried forward.

PEKING TELEPHONE SYSTEM.—The Imperial Chinese Telephone Administration expects to have the new system installed and operating by May 1911. The Western Electric Company of New York and London supplied the plant and Messrs. P. Carey and A. J. Pierson, electrical experts, are representing the company. *The Peking Daily News* describes the system as follows:

"The system is known as the common battery (magneto) system, which has been in operation in the United States for more than twelve years.

"Two telephone exchange buildings have been erected. The first is a large foreign edifice, of red brick, on the Hatamen road, below the Ketteler memorial; the second exchange building is in the Chinese city, to the west of Chien-Men and close to the Tartar city wall.

"Three thousand telephones are being put up, but the plant will admit of an increase up to 12,000, as the switch-boards, at each of the two "exchanges," have been designed each with a capacity of 6,000 telephones.

"The telephone wires have been laid under ground. This, although it has increased the initial outlay, will greatly reduce the subsequent cost of maintenance, as no damages to poles or wires, caused by gales, etc., will have to be reckoned with. The cables are of lead tubing 3½ inches in diameter, and contain 400 wires. The wires are wrapped loosely in paper, the function of the paper being merely to hold the wires apart. The cables are laid in earthenware pipes.

"The system is practically this: instead of ringing a small bell for about half an hour, the person who wishes to "call" the "exchange," simply takes the microphone (or receiver) off the hook. This closes the circuit, and immediately a small lamp, in front of the operator's switchboard, is set alight. The operator then plugs the hole near the lamp signal. This plug is connected by a cord to another plug with which the operator plugs the hole belonging to the number asked for. The whole process is beautifully simple and saves much time, inasmuch as there is no endless ringing or shouting for the operator. The two speakers cannot be disconnected without the receiver being put back on the hook. The telephones, being without batteries, will never get out of order; there is a common battery, at the central exchange for the whole system."

THE ILOILO TELEPHONE SYSTEM.—The Iloilo Telegraph and Telephone Company began operations the first of the month with over a hundred members and orders for many more.

SABANG BAY WIRELESS.—The *Java News* states that "the wireless station (Telefunken system) at Sabang will be ready next April. The stations at Sitohbondo, Timor Koepang and Ambon must be ready respectively in July, September and December of next year.

"When the station at Sabang will be in operation, the Netherlands Indies will be the first country of this part of the world where such an installation exists. It is true that there is one at Bombay, but of very short distance only. Wireless stations are building at Colombo and Singapore, but the one at Sabang will be ready before those."

NATIONAL CONTROL OF WIRELESS.—General Allen, Chief of the U. S. Signal Corps, in his annual report, recommends the national control of wireless communication in peace and war. There are now fiften military wireless stations in Continental America.

PHILIPPINE MILITARY TELEGRAPH AND TELEPHONE SYSTEM.—The cables laid include fire control in connection with defence of Manila Bay, 10,336 miles; Legaspi-Liguan cable 14.5 miles; land wires 34 miles; twenty telephone exchanges aggregating 437 phones and four long distance with 106 miles of wire. The wireless stations in the islands include Manila, 1 Kilowatt; Fort McKinley, .75 Kilowatt; Fort Mills .125 Kilowatt and a 10 Kilowatt station at Fort Mills and a 1 Kilowatt station at Fort Wint were under construction.

PUBLIC WORKS, DOCKS, WHARVES, BUILDINGS, ETC.

PHILIPPINE LIBRARY BUILDING.—The Philippine Assembly is considering a bill appropriating ₱300,000 for a public library building of reinforced concrete in Manila.

NEW SEWERAGE SYSTEM FOR SINGAPORE.—Consul General James T. Du Bois makes the following report:

"The municipality of Singapore has under consideration extensive improvements in the sewerage system of this city which will involve an expenditure of about $2,500,000.

"The plans have not been perfected, but permission has been granted to make the improvement, and as Singapore seriously needs a new sewerage system and as public opinion demands it, there seems no doubt that the important change will be undertaken as early as possible. For this reason American contractors are notified of the contemplated improvement that they may, if desired, take preliminary steps, such as requesting the municipal authorities of Singapore to give them details of the proposed work.

"The location of Singapore, especially the business portion, is only about 7 feet above tide water and the suburbs have some swampy sections, so that the proposed drainage must be accomplished by pumping and purifying works. The city of Singapore has a population of about 280,000, of which only 4,000 are Europeans, but there are thousands of well-to-do Chinese, Eurasians, and Indians here, and an entirely new lavatory system must be instituted if the work is carried out. This will create a great demand for toilet furnishings, a large proportion of which must be constructed to meet the peculiar demands of Chinese, Malays, and Indians, who constitute over 90 per cent of the population."

THE WHANGPOO CONSERVANCY.—During the quarter ended September 30 the entire expenditure amounted to Tls. 559,889.12. Dredging stopped August 13 and represented in all 162,676 cubic yards of which 112,671 were pumped behind the R. W. Burding Woosung and the balance dumped from barges behind dams. On the Woosung outer bar training works 26,429 tons of rock were used for filling in between concrete blocks in the top works and on the stopes of jetty and training dyke. This work is urged continued without interruption.

NEW SUPREME COURT AT CANTON.—This building is being erected at a cost of Tls. 70,000.

SALT WATER SYSTEM FOR SINGAPORE.—The Municipal Commissioners have arranged to expend $100,000 (Straits Cur.) for the installation of a salt water system to be utilized for street sprinkling and flushing the drains.

CHEMULPO WATERWORKS.—This system which was recently completed occupied over four years in construction and cost 2,400,000 yen. The *Seoul Press* gives the following description:

"The water-source of the waterworks is in the Han River, a mile above the railway bridge. The pumping station stands on the left bank of the river, outside the prosperous town of Noyangjin. The grounds cover an area of 25,000 yards and contain an engine house, three settling basins, and four filter beds. The engine-house is a solid and beautiful building constructed of bricks and stone, while the settling basins are constructed of stones and the filter beds, constructed of concrete, are entirely covered with arched roofs. Both of these have respectively a total capacity of 560,000 cubic feet, sufficient for two days' consumption by a population of 70,000. A clear-water basin on a hill just behind the pumping station, about 300 feet above sea level, receives water pumped up from the station. It has a capacity of 140,000 cubic feet, sufficient for half a day. Water is led from this basin to a distributing reservoir at Chemulpo by means of the main pipes, 20 inches in diameter and about 18 miles in length. The distributing reservoir at Chemulpo is on the top of a hill called Songim San, about 200' feet above sea level, standing to the northeast of the town. It has a capacity of 560,000 cubic feet, or two days' maximum supply. The basin, which is divided in three sections, is chiefly constructed of concrete and entirely covered with arched roofs. The capacity of the waterworks has been so made as to furnish a supply of 280,000 cubic feet of water a day, on a basis of 4 cubic feet per head of 70,000 inhabitants, the possible population in the near future being estimated as follows: Koreans, 30,000; Japanese and foreigners, 25,000; and 15,000 for ships watering at the port. The pumps, engines and other machines, as well as pipes used were mostly manufactured in Japan. The chief items of expenditure and their amounts in round figures were: business part of work, 321,800 *yen*; construction work at Noyangjin, 449,700 *yen*; construction of the distributing reservoir, 147,200 *yen*; work of laying pipes, 1,034,000 *yen*; and machinery, 186,100 *yen*."

PHILIPPINE BRIDGE CONSTRUCTION.—Governor General Forbes has sent a recommendation to the Assembly with regard to the ₱500,000 to be utilized in the construction of joint railway and highway bridges.

DEVELOPMENT OF A PORT AT NAN LIEN BAY.—The American engineer secured by Viceroy Hsi Liang to make a survey of this bay submitted two plans for developing the harbor and the one that provides for bunding 4.5 miles long and to cost Tls. 3,000,000 has been adopted. The work will take five years to complete. This is the proposed new ice free port for Manchuria

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THE KRIAN IRRIGATION SCHEME.—With the expenditure of $23,000 (Straits Cur.) in 1911 this project will be completed. The entire cost is $1,600,000.

JAPAN'S PUBLIC IMPROVEMENTS.—Consul Carl F. Deichmann, of Nagasaki, furnishes the following information:

"A number of municipal and national projects are underway for public improvements in this district.

"One of the estimates of the Home Department is for the improvement of the Shimonoseki Straits, viz, $6,474,000, which is to extend over a period of ten years; it is also planned to enlarge the Government Iron Works at Wakamatsu until the plant is large enough to supply the entire demand of Japan for steel and iron. Harbor works are planned for the ports of Kagashima and Oita, in the Island of Kyuchu, the money therefor to be raised jointly by the municipalities and prefectures, assisted by the Government. The city of Fukuoka-Hakata is planning a waterworks system to cost $2,988,000, toward which the Government is expected to be a large contributor. It will take three years to complete the works.

"The budget for the next fiscal year is to contain an item of about $300,000 to make the Fukuoka Medical University independent of the Kyoto University. It will be called the Kyushu University, and engineering and scientific colleges will be added to the medical college."

VLADIVOSTOCK HARBOR WORKS.—An appropriation of 13,000,000 roubles has been asked for to improve this harbor. This will include the construction of three new piers and warehouses covering an area of 16,000 square yards and extend the basin.

SWATOW WATERWORKS.—It is reported that the construction of these works has been undertaken by a British firm in Hongkong.

LIAO RIVER CONSERVANCY.—The Viceroy of Manchuria has asked for authority to dredge the river and construct strong retaining walls on both sides of the river.

PHILIPPINE LUMBER FOR CHINESE EMPEROR'S MAUSOLEUM.—The S. S. Hellas cleared from Zamboanga for Shanghai last month with 700,000 feet of lumber consigned by the Port Banga Lumber Co. to the Chinese Government. Many of the logs measure four feet in diameter and 40 feet in length.

SHIPBUILDING, GENERAL MARINE AND FISHERIES

BLUE TUNNEL RECORD.—The S. S. Teucer is reported to have made the distance between Victoria and Yokohama in 12 days, 15 hours and 53 minutes during her last transpacific voyage.

PHILIPPINE SHIPPING.—During the fiscal year just past, the entire commercial intercourse with other countries to all ports of the Philippines was effected by 862 entrances and 872 clearances of vessels, representing an aggregate movement of 3,378,952 registered tons, as compared with 764 entrances and 750 clearances, representing an aggregate tonnage of 2,802,893 registered tons for the previous year, showing an increase of 576,059 registered tons. The value of the inward and outward cargoes amounted to $76,948,777, the greater part of which, that is to say, 73 per cent, was carried by vessels flying the British flag, 9 per cent by Spanish vessels, 6 per cent by German, 5 per cent by American, and 3 per cent by Japanese vessels. Considering the fact that the value of the products shipped to and from Great Britain amounted to $11,506,570 or 15 per cent of the total, and that the value of the products shipped to and from the United States amounted to $29.527,549, or 38 per cent of the total import and export trade.

NIPPON YUSEN KAISHA STEAMERS.—This company has placed orders for one steamer each of 6,000 tons with the Kawasaki Dockyards and the Mitsui Bishi Company and orders for four more of the same size will follow. These steamers will have a speed of 12 knots and take the place of the vessels of this company at present in the trans-Pacific service.

PHILIPPINES CUSTOMS LAUNCH.—The keel of a 23 knot launch of semi hydroplane type has been laid at the works of Mcdonald & Co. at Kowloon to the order of the Philippine Government. A sailing yacht designed on the pattern of the cup defender is being constructed by this firm to the order of Governor General Forbes.

THE NIPPON YUSEN KAISHA.—The following is a statement of accounts and distribution of profits for the last half year:

	yen.
Profits during the term	2,348,085
Balance brought forward from last term	858,616
Total	3,206,701
To be distributed as follows:—	
To reserves	117,404
To the replenishment funds of navigation line bounty and navigation encouragement bounty	1,073,432
Allowance to directors and auditors.	59,465
Dividends to shareholders (10 per cent per annum, viz. 2.50 yen per share)	1,110,000
Balance to be carried forward to next term	856,400

During the half year term between April 1 and September 30 the company employed on its various lines 69 steamers of the aggregate tonnage of 281,000 tons of its own fleet and eight chartered steamers of the aggregate tonnage of 31,000 tons. The quantity of cargo and the number of passengers carried by those vessels during the period was 1,490,000 tons and 111,000 persons respectively in round figures. The total mileage run reached 1,610,000 odd nautical miles.

THE TSINGTAU DOCK COMPANY.—The s. s. Foo Mu, constructed by this company for the Chinese Government, arrived at Shanghai early this month.

THE JAPANESE ANTARCTIC EXPEDITION—This expedition consisting of 28 members under the command of Lieutenant Shirase sailed on board the Kainan-maru from Shiboura, Toyyo, on November 28th. The vessel is a three masted schooner of 200 tons having a length over all of 100 feet, 22 foot beam, and a depth of 12 feet. The expedition expects to complete the voyage to Edward VII Bay, a distance of 7,170 miles, by February next.

CUTTERS FOR CUSTOMS SERVICE.—The Philippine Collector of Customs has recommended the construction of two fast cutters for the patrol of southern waters.

TRAWLERS FOR THE PHILIPPINES.—A company has been formed in Manila for the purpose of exploiting the deep sea fishing industry. Two steam trawlers have been ordered from England and more will be added as the operations of the company extend.

THE MITSU BISHI DOCKYARDS.—The following is a list of the vessels under construction at these works which have concluded a very active year:

Yamakaze, an ocean-going torpedo-boat destroyer with turbine engines;

Second class cruiser for the Imperial Navy, turbine engines;

Three steel water-boats, each of 24 tons, for the Imperial Navy;

Shinno-maru, for the Toyo Kisen Kaisha, a sister-ship to the Tenyo-maru and Chiyo-maru, 13,700 tons, 16,850 horse-power, turbine engines;

Gunboat for the Chinese Navy;

Shelter-deck steamer for the Nippon Yusen Kaisha, 6,000 tons, 5,500 horse-power.

Canada-maru three-deck steamer, 6,000 tons, 5,000 horse-power, for the Osaka Shosen Kaisha,

During the year two large vessels for the Osaka Shosen Kaisha of over 6,000 tons and 5,200 h. p. each, were completed, and an ocean going torpedoer and two steam trawlers will be completed by the end of the year.

THE VULCAN IRON WORKS.—The trial trip of the new motor launch constructed by the Vulcan Iron Works of Shanghai for Messrs. Garner Quelch & Co. took place last month. This is the tenth boat of this type to local order constructed by this company. It will be used for harbor work and is 35 feet in length.

NEW JAPANESE BATTLESHIP.—Messrs. Vickers, Son and Maxim have secured the contract for the construction of a new dreadnought cruiser of 27,000 tons. The contract price is £2,500,000. The entire vessel and armament is to be of English material and construction.

DOCK PUMPING PLANT CONTRACT.—The Cannon Street and Hammership Hammersmith Works have secured the contract for supplying for the pumping plant of the new graving dock at Singapore. The pumps are to be installed by the end of 1911.

San Francisco-New Zealand Line.—The Union Steamship Company of New Zealand proposes establishing connections between the colony and San Francisco every 26 days, calling at Tahiti. It is understood that the company has secured a sufficient subsidy to carry out this plan.

The Kiangsi Steam Navigation Co., Ltd.—This new company has been organized with a capital of Tls. 200,000 for the purpose of acquiring the plant and good will of the Hsiang Chong Ship Company established at Nan Ching, Kiukiang and Woo Ching and to carry on and develop the business in Poyang Lake.

Toyo Kisen Kaisha Subsidy.—The state subsidy for 1911 amounts to yen 3,000,000, of which yen 2,500,000 will go to North American service which includes the Tenyo, Chiyo and Nippon while the balance will go to the three steamers on the South American run.

Compania Trans-Atlantica New Steamers.—The steamers Isla de Panay and the Fernando Poo are to be superseded by new steamers each of 10,000 tons displacement with accommodation for 90 first class passengers and 60 second class. They have a speed of 16 knots an hour. These vessels will make their first trip to Manila from Barcelona in March and April of next year respectively.

Canadian Pacific Activity.—The construction of two new vessels of the type of the Empress of Ireland and the Empress of Britain in the Atlantic service is proposed by the directors of this company for the Pacific Ocean.

The Labuan S. S. Company, Ltd.—This is the name of the new company recently organized with a capital of $50,000 for the purpose of developing the carrying trade in Brunei Bay and around Labuan. The s. s. Krang has been purchased for this work.

Lloyd's Returns.—The report for the quarter ending September 30 places the number of vessels under construction in the United Kingdom at 360 representing 1,154,197 tons gross. Of the steamers 341 are of steel with a gross tonnage of 1,149,914 and of 5 of wood and composite with a gross tonnage of 570, while of sailing craft there were 14 of steel tonnage 3,004,8 wood and composite with a gross tonnage of 709. The total increase over the corresponding quarter 1909 was 78 vessels and in gross tonnage 376,161.

The total of warships under construction in royal dockyards includes one battleship, two protected cruisers, two third class cruisers and two submarines, representing 75,630 tons displacement, and at private yards 5 battleships, 3 armored cruisers, 5 protected cruisers, 33 torpedoers, 2 scouts and 7 torpedo destroyers making a total in private yards of 60 vessels of 236,885 tons displacement or a grand total of 67 warships with a displacement of 312,515 tons.

Germany's activity is represented by 50 vessels, exclusive of warships, aggregating 139,117; the United States next with 66 vessels and an aggregate tonnage of 117,603, followed by France with 22 vessels with gross tonnage of 91,426.

MINES, MINERALS AND THE METAL TRADE, MACHINERY, ETC.

The Oriental Consolidated Mining Company.—The report for the year contains the information that the total receipts amounted to $1,434,494, the operating expenses $780,258 and the net profit $654,236. The amount of $30,559 was expended in development work. The net profit shows an increase of $67,307 compared with the corresponding term the previous year. The plant was increased, a battery of ten stamps added to one of the mills. A dividend of 50 cents gold was declared last month making $1 so far for this year.

The Tongkah Tin Dredging Company.—The Siamese Government has released this company from its contract to construct a dock and dredge a channel in the harbor under an agreement whereby the company pays a lump sum to the Government.

The Kamuning Rubber and Tin Company.—This company reported a net profit from its tin mining operations of £5,292. This property is situated in Perak and the deposits are worked on the tribute system.

Shensi Oil Wells.—A report has been received from Shensi to the effect that a company capitalized at Tls. 6,000,000 has been organized for the purpose of developing the oil deposits and a charter has been asked for.

F. M. S. Tin Export.—The total export for the ten months ended October 31, exclusive of Upper Perak and Pahang, is represented by 580.047 piculs, a decrease of 49,521 compared with the corresponding period, 1909, while the increase in values amounted to $1,835,000 (Straits Cur.) approximately.

Mindoro Sugar Mill.—The machinery for the mill to be installed on the island of Mindoro having a capacity of 2,000 tons of cane daily, will begin to arrive next month. It is supplied by the Honolulu Iron Works. The site for this plant has been prepared and eleven miles of railway for transportation purpose have been laid. The mill is expected to be ready to take care of the 1911 crop.

Raub Returns —For the four weeks ended October 9 gold returns amounted to 766 ounces bullion from 4,758 tons of rock crushed and for the succeeding four weeks 653 ounces.

The Chinese Engineering and Mining Company, Ltd.—The gross profit for the year was £243,000 and a credit balance for the year of £210,574. Of this amount £10,000 was set aside for redemption of debentures; £30.000 carried to reserve for depreciation, leaving a net profit of £170.574. An interim dividend of 1s. 6d. per share was paid in May and an additional dividend of 1s. 6d, making 15°/o for the year, was recently declared. The year covered was concluded on February 28, 1910.

The output of the mines amounted to 1,359,502 tons, an increase of 133,500 tons over previous year, while the sales increased 86,788 tons. The capacity of the mines as now equipped is 2,000,000 tons yearly and the estimated quantity of coal in sight at the end of the year was 9,000,000 tons. The feature of the year was the invasion of the Pacific Slope market by the shipment of 5,000 tons to San Francisco as preliminary to more active operations. Also the appointment of an agent in the Dutch Indies. Competition in the home trade has been keen owing to the activity of the Japanese mines in Manchuria and the Lanchow mines in the Keiping Basin.

Manchurian Mineral Wealth.—The *Journal of the Yokohama Chamber of Commerce* reviews the extent of the mineral deposits of the Eastern Provinces as follows:

"Manchuria has iron mines on the Antung-Mukden Line and at Saimachi, Tunghua and Puaijan. None of them can compare with Tayeh in respect to the percentage of iron contained in the output. As the hoard of iron in the world is fast being drawn upon, these mines of about 50 per cent. grade may come to attract notice in due order of things.

"Chiapikon, situated on a tributary of the Sungari and at 150 miles southeast of Kirin, suggests itself as the first gold mine of Manchuria, but, after long years of constant operation, this mine appears quite exhausted and is reported to have sunk below commercial workability.

"There are a few other gold mines, besides, considered to be worth trying although what returns they may give remains an open question.

"Alluvial deposits may be found in the rivulets running down the hills near Chinkang on the Antung-Mukden Line. None of them are, however, good enough to warrant working upon. At Yuanchiatun, about 2½ miles east from Pulantien, traces of experimental mining carried on under the Russian regime are still visible. This can imply in no sense that it is promising, but only that at any rate it may be worth looking into. The same may be said of the gold mine of Laotieheshan near Port Arthur.

"There is a good sized vein of marble four miles from Wanchialing. Its product is of fine quality, but not milkwhite in colour. Another vein of much more considerable extent lies four miles from Tashihohiao. The marble is not quite as good as that of the other mine. The location of this mine, however, commands larger facilities of transportation, and this coupled with the large scale on which it occurs invites careful inquiry. Its output is being used in place of granite and as material for the piers of railway bridges near Tashihchiao.

"Limestone may be found almost ubiquitously in Manchuria. How the Chinese could go without cement prior to its introduction by Westerners was perhaps because they had any amount of limestone at easy command."

The Fushun Coal Mines.—For the six months ended September 30, the total of coal exported by these mines from Port Arthur and Dairen was 147,242 tons and of this amount Hongkong received 27,000 tons, Chemulpo, 19,500 tons and the balance was distributed among Yokohama, Moji, Fusan, Chefoo, etc.

Dredging in Siberia and Russia and Siberia in 1909.—The *Mining Journal* reviews the report of the Permanent Consultative Bureau of Gold and Platinum Industrialists covering the work of 48 dredges out of a total of 55 in operation and refers to the increase in values won by the average dredge compared with previous years. The *Journal* says:

"A comparative table of the work done over the past four years shows a remarkable improvement in the precious metal won per dredge, and a presumably better financial result to the proprietors. Thus in the years 1906, 1907, 1908, and 1909, the quantity—average—per dredge was 2 poods 22 funts 24 zolotniks=1,347 ozs.; 2 poods 6 funts 67 zolotniks=1,142 ozs.; 2 poods 28 funts 91 zolotniks=1,434 ozs.; and 3 poods 17 funts 53 zolotniks=1,811 ozs. respectively. In the same series and order of years, the number of hours worked per dredge was 2,837 6, 2,259.23, 2,502.24, and 2,771.7 hours respectively, and the quantity of sand or gravel raised and washed was 12,562.2 cubic sazhen=159.538 cubic yards; 10,965 33 cubic sazhens=139,256 cubic yards; 13,099.49 cubic sazhens=166,357 cubic yards; and 14,715.92 cubic sazhens=186,881 cubic yards.

"Thus we find that in the year 1909 the average quantity of ground raised and washed per dredge had increased by 1,616 cubic sazhens=20,523 cubic yards over that of the preceding year, or 12.4 per cent., and there was an increase of gold produced of 28 funts, 69 zolotniks=378 ozs., or 26.2 per cent.

"The feature in the returns to which the report calls attention is that whereas the quantity of ground raised and washed made 12 4 per cent. more than in the preceding year, the quantity of precious metal won increased at over double that rate, or 26.2 per cent. The conclusion drawn from this gratifying situation is that the gold industrialists, taught by bitter experience, have set themselves to work on richer sands. This observation appears to be justified by the fact that in 1909 the gold yield per cubic sazhen (12.7 cubic yards) rose to 86 15 dolies=123 oz., against 76.65 dolies=109 oz. in the preceding year."

Standard Oil Activities.—A report has been received to the effect that the Standard Oil Company proposes developing its oil deposits in the Dutch Indies.

FINANCIAL, COMMERCIAL AND MISCELLANEOUS NEWS

THE PHILIPPINE AGRICULTURAL BANK—During the fiscal year 1910, 148 applications were made for loans, amounting to ₱494,574. The number of loans granted was only 89, amounting to ₱229,000. Five loans, amounting to ₱7,200, were repaid. Delinquent interest on 5 loans amounted to ₱1,415.24. Three loans amounting in principal and interest to ₱14,045.24 were pending on foreclosure proceedings.

The total amount loaned by the bank at the close of the fiscal year 1910 amounted to ₱284,450 or approximately 28½ per cent of the bank's capital. Of this amount only 5½ per cent was placed during the fiscal year 1909, and 23 per cent during the fiscal year 1910.

STRAITS SETTLEMENTS TRADE.—Reviewing the trade returns for the last quarter the *Singapore Free Press* says:

"The total value of merchandise imported in the last quarter was $90 213,662. Of this amount Singapore took $65, 924,6t8. The figures for the corresponding quarter of 1909 were $78,797,140. Of this Singapore took $57,712,156. The totals of exports were $82,882 605. Of this Singapore sent $55,607,110. The figures for 1909 were $70,887,6:4 Of this Singapore sent $46,854,944. The value of gold coin imported was two and a half million dollars, and exported half a million. Machinery imports showed a considerable drop, but motor cars, etc., rose from $173,159 in 1909 to $482,320 in 1910. There was an increase of a hundred thousand dollars in the value of woollen cloths imported, most of which appears to have stayed here. Piece goods also rose from seven hundred thousand to eleven hundred thousand, a large quantity being retained. Plain cottons remained about the same, but all other classes under the cotton goods heading increased considerably in value. Oils remained mainly steadfast, except that the benzine trade naturally grew to a considerable extent. Para rubber imports rose from a million and a half dollars value to nearly three millions, whilst the exports reached a total of five millions in value.

INTERNATIONAL COTTON M'F'G CO.—The report for the year ended September 30 shows a profit of Tls. 21,316.10.

FORMOSAN SUGAR & DEVELOPMENT CO.—The report for the year ended June 30 shows a profit of £27,212. After writing off interest, depreciation on plant, machinery, buildings, railroad, goodwill, etc., a balance remains of £13.898, to which must be added the balance brought forward, making £14,350. The directors recommend a dividend of 20 per cent. on the ordinary shares, and setting aside £526 for directors' fees and for reserve fund £1,389, leaving to carry forward £4,889.

MANILA'S MOSQUITO CRUSADE.—The success of the crusade against the night mosquito has resulted in a proposal to maintain a permanent eradicating force.

PHILIPPINE POSTAL BANKS.—The Bureau of Posts and Telegraphs has opened 44 new branch banks in twenty different provinces and the Governor General proposes distributing prizes among the school children who give the best evidences of thrift.

JAPANESE POSTAL SERVICE INNOVATION.—Letter carriers are to be intrusted with collection debts. The charges are to be 3 *sen* for a debt of 1 *yen* or less; 4 *sen* for 3 *yen*; 5 *sen* for 5 *yen*; 6 *sen* for 10 *yen*; 8 *sen* for 50 *yen*, and 10 *sen* for 100 *yen*. With regard to sums exceeding a hundred *yen*, 5 *sen* additional will be charged for every hundred *yen*, says the *Japan Mail*. In order to avail oneself of this facility it will be necessary to be enrolled in the Savings Transfer List of the Post Office Banks. The post office will of course be responsible for money collected and in case of money not collected the charge will be 2 *sen* without reference to amount of obligation. A debtor will be dunned three times per month, and failure to obtain payment will then entail a fresh commission from the creditor.

FORMOSAN TEAS PRODUCTION.—The estimated crop of tea for 1910 is placed at 20,000,000 pounds, an increase of 1,000,000 pounds compared with last year.

The shipments of Formosa Oolong tea to America have amounted to 6,945.860 pounds via Pacific and 4,026,956 pounds via Suez, a total of 10,972,816 pounds. Shipment of Oolong tea to other countries: England, 515,159; Australia, 61,561; China, 1,932; Germany, 19,596; a total of 598,248 pounds. The total shipments to September 1, including 3,500,000 pounds of Powchong, reach 15,071,064 pounds.

F. M. S. SUPPLY ENACTMENT.—The following are the principal items in the supply enactment as sanctioned by the federal council:

1.	Pensions and Retired Allowances	$404,468
2.	The Rulers and Native Officers	503,686
3.	The High Commissioner	43,236
4.	Resident General, Federal Secretariat and Cadets	168,791
5.	Residents	185,861
6.	British Agent, Trengganu	11,123
7.	Treasury	90,082
8.	Audit	95,732
9.	District and Land Offices (including S'ment Offices)	733,909
10.	Courts	170,674
11.	Legal Adviser	28.545
12.	Trade and Customs	249,401
13.	Marine and Fisheries	168.969
14.	Chinese Departments	57,752
15.	Mines Department	239,988
16.	Geological Investigation	12,511
17.	Forest Department	411,193
18.	Agricultural Department (including Govt. Gardens and Plantations)	131,417
19.	Indian Immigration	199,729
20.	Education	375.780
21.	Medical	1,402,919
22.	Post and Telegraphs	943,578
23.	Surveys	1,227,658
24.	Police	1,048,694
25.	Prisons	315,264
26.	Museums	35,231
27.	Bands	15,060
28.	Government Printing Office	89.993
29.	Municipal (Sanitary Board, etc.)	928,647
30.	Malay States Guides	413,539
31.	Expenditure under Volunteer Enactment, etc.	34,416
32.	Census	95,000
33.	Transport	54,100
34.	Exchange	6,500
35.	Purchase of Land	112,400
36.	Miscellaneous Services	296,850
37.	Railways (including additions to Capital Expenditure)	5,462,906
38.	Railway constructions	5,206,169
39.	Public Works Department	1,056,589
40.	Public Works Annually Recurrent	2,625,325
41.	Public Works Extraordinary	4,484.775
	Total	$30,138,460

PHILIPPINE CURRENCY CIRCULATION.—"On June 30, 1910, there were ₱25 805,000 silver certificates in the Treasury vaults and ₱22,797,454 in circulation, a total of ₱48,602,454. During the year mutilated silver certificates were destroyed, as follows: Full value, ₱5,167,812; half certificates, ₱51,50; total ₱5,167,863.50. This sum deducted from the amount of certificates existing at the close of the preceding year leaves ₱43.434,590-new notes.

"The total amount of money in circulation in the Islands on June 30, 1910, was ₱48,754,697.36, as compared with ₱41,528,607.74 on the same date in 1909, showing an increase of ₱7,226,089.62.

COPRA IN THE FEDERATED MALAY STATES.—There are 123,815 acres in cocoanuts of which two-thirds are bearing and the export of copra for 1909 amounted to approximately 7,000 tons.

KOREAN COTTON INDUSTRY.—A company has been formed with a capital of Yen 10,000,000 to engage in the cultivation of cotton in Chosen and it is proposed to amalgamate with another company engaged in the same adventure having a capital of Yen 2,000,000.

BRITISH AND CHINA CORPORATION.—The profits for the year amounted to £11,478 making a total to credit of profit and loss of £23,198. A dividend of 10s. a share, or 10%, was declared.

MANILA'S DEATH RATE.—The report of the Bureau of Health for the quarter contains the information that the mortality rate was 34.93 compared with 43.18 for last year.

FORMOSAN SUGAR CROP.—The estimates place the 1909-10 production at 200,000 tons, of which 20,000 tons represent domestic consumption.

EWO COTTON SPINNING CO., LTD.—Profit and Loss account showed a credit of Tls. 78,407 recommended apportioned as follows:

To pay Dividend on Preference Shares at rate of 7% per annum	Tls.	9,493.14
To pay a Dividend of Tls 4 per share on 15,000 ordinary shares	,,	60,000.00
To carry forward to New Account	,,	8,914.22
	Tls.	78,407.42

F. M. S. RUBBER.—The returns for October aggregate 600,000 pounds approximately.

RUBBER DIVIDENDS.—The Perak Rubber Plantations, interim of 12.5%; Vallambrosa, interim of ⅙; Singapore Para, 12 5%, Pegoh Rubber, final of 10% making 17% for year; Kuala Lumpur, final of 45% making 75% for the year; North Hummock, 25% for the year; Harpenden, 25%; Edinburg, 15%, Kellas, interim of 10%; Lanadron, interim of 12 5%; Ledbury 10% and Straits Plantations 6%.

TRADE OF CEBU TREBLED.—The report of the Cebu Customs shows an increase of collections from ₱75,518 in November 1909 to ₱233,000 in the November 1910.

LONDON METAL MARKET

The following are (November 4) prices:—

COPPER.	£ s. d.	£ s. d
*Tough cake and Ingot	61 10 0	62 0 0
*Best Selected	61 10 0	62 10 0
*Electrolytic	62 0 0	62 10 0
*Sheets and sheathing	73 0 0	—
*Flat bottoms	76 0 0	—
STANDARD †Cash	57 18 9	—
STANDARD †Three Months	58 17 6	—
*Copper tubes, seamless per lb.	0 0 8¼	—
*Lake	62 5 0	62 15 0

* Less 3½ per cent. † Net.

ALLOYS.		
BRASS: Wire	0 0 6⅝	—
,, Tubes (solid drawn)	0 0 6¾	—
,, Sheets	0 0 6⅞	—

TIN.		
English ingots, f. o. b.	165 0 0	166 0 0
,, bars	166 0 0	167 0 0
,, refined	167 0 0	168 0 0
Straits... Cash	165 10 0	—
Straits... Three months	165 15 0	—
Australian spot	—	—
Banka (in Holland) Cash	166 0 0	—
Banka (in Holland) Three months	166 10 0	—

LEAD.		
Spanish or soft foreign	13 2 6	13 3 9
English pig, common	13 6 3	13 7 6
,, L. B.	13 15 0	—
,, sheet and bar lead	14 17 6	—
,, pipe	15 7 6	—
,, red	15 15 0	—
,, white	18 5 0	—
,, patent shot	16 7 6	—

SPELTER.		
Silesian ordinary brands	24 0 0	24 1 3
,, special brands	24 0 0	24 10 0
English Swansea	25 0 0	25 10 0
Sheet zinc	29 5 0	—

ANTIMONY.		
Antimony	27 0 0	29 0 0
,, Crude	12 0 0	13 10 0
,, Ore (basis 50%)	7 0 0	8 0 0

QUICKSILVER.		
Flasks, 75 lbs. warrants	8 7 6	—

ALUMINIUM.	Per ton.	Per ton.
98-99 per cent.	70 0 0	72 10 0

NICKEL.	Per ton.	Per ton.
98-99 per cent. guaranteed	167 10 0	171 0 0

FAR EASTERN STOCKS AND QUOTATIONS

Courtesy of Messrs. Kadoorie & Co., Hongkong, December 3, 1910.

STOCK.	WHEN ESTABLISHED	CAPITAL	NO. OF SHARES	VALUE	PAID UP	RESERVE	AT WORKING ACCOUNT	DATE	LAST DIVIDEND.	Approximate Yield per cent per annum at Present Quotation	CLOSING QUOTATIONS
BANKS.											
Hongkong & Shanghai Banking Corporation	1865	$15,000,000	120,000	$125	$125	g £1,500,000 s $16,000,000 i $250,000	$2,029,390	31-6-10	£2. for first half year ending 30-6-10, @ ex 1/9⅜ = $22.456	5%	$890 sales £86[
National Bank of China, Ld.	1891	£699,475	10) 99,925	£7	£6	c £4,099 $400,000	$34,167	31-12-09	$2 (London 3/6) for 1903	....	$80 buyers
MARINE INSURANCES.											
Canton Insurance Office, Ld.	1881	$2,500,000	10,000	$250	$50	$1,600,000 j $268,696 u $305,181	Nil.	31-12-08	$15 for 1909	8½%	$182 sales
North China Insurance Co., Ld.	1903	£150,000	10,000	£15	£5	g £125,000 s Tls. 225,000 u Tls. 368,644 f Tls. 137,308	Tls. 205,719	30-6-10	Final dividend of 7½% for 1909 making 15% in all....	5%	Tls. 120 buyers
Union Ins. Society of Canton, Ld.	1867	$3,100,000	12,400	$250	$100	s $3,000,000 g £90,000 f $287,984 j $1,449,735 u $713,985	2,552,545	31-12-09	Final of $20 per share, making in all $50 per share for 1908, and an int. div. of $30 per share for 1909	6%	$825 buyers
Yangtsze Ins. Association, Ld.	1889	$1,200,000	12,000	$100	$60	$1,000,000 j $371,802 £169,861	$797,602	31-12-09	$12 for year ending 31-12-08 and interim of $3 on account of 1909	7¾	$195
FIRE INSURANCES.											
China Fire Ins. Co., Ld.	1870	$2,000,000	20,000	$100	$20	$1,000,000 x $550,348 f $61,168	$438,406	31-12-09	$6 and bonus $2 for 1908	7%	$116 buyers
Hongkong Fire Ins. Co., Ld.	1868	$2,000,000	8,000	$250	$50	$1,460,000 j 81,153	$426,218	31-12-09	$27 for 1908	8%	$353 buyers
SHIPPING.											
China & Manila Steamship Co., Ld.	1882	$750,000	1) 30,000	$25	$25	i $57,734	Dr $3,777	31-12-09	$4% for 1906	....	$8
Douglas Steamship Co., Ld.	1883	$1,000,000	20,000	$50	$50	$230,000 i $100,589	Nil.	30-6-10	$2½ for year ending 30-6-1908	....	$20 sellers
Hongkong, Canton & Macao Steamboat Co., Ld.	1865	$1,200,000	80,000	$15	$15	e $250,000 d. i. $630,000 f $130,545 $ 19,106	$18,026	30-6-10	Dividend of $1½ for half year ending 30.6.1910	8½%	$31
Indo-China Steam Navigation Co., Ld. (Preferred) Do. Do. (Deferred)	1882	m £600,000	2) 60,000 2) 60,000	£5	£5	i £138,100	£15,162	31-12-08	3% = 3/- on Preferred shares only for 1910	....	$58 sellers
"Shell" Transport & Trading Co., Ld.	1898	£ 2,000,000	2,000,000	£1	£1	£120,000 i £1,000,000	£205,868	31-12-09	Final div. of 2/6 per share (coupon 14) making in all 4/6 per share for 1909, and an int. div. of 1s. per share on % for 1910	5%	82/-sellers £11 buyers
"Star" Ferry Co., Ld.	1898 1900	$200,000	10,000 10,000	$10 $10	$10 $5	$6,500 i $55,830	$1,159	30-4-10	A dividend of 7% and bonus of 5% making 12% for year ending 30.4.1910	5% 6%	$23 $12½
REFINERIES.											
China Sugar Refining Co., Ld.	1878	$2,000,000	20,000	$100	$100	e $520,000 r $83,620	Dr. $8,090	31-12-09	$5 for half year ending 30-6-1910.	6%	$125
Luson Sugar Refining Co., Ld.	1882	$700,000	7,000	$100	$100	none	Dr. $101,851	31-12-09	$3 for 1897	....	$22 sellers
MINING.											
Chinese Engineering & Mining Co., Ld.	1901	£1,000,000	1,000,000	£1	£1	d £215,000 h £12,289	....	..	Final div. of 1/6 for the year 1910 making 15% (coupon 15)	9%	Tls. 16
Headwaters Mining Co.	1908	₱600,000	28) 600,000	₱10	₱10				First year		₱10
Raub Australian Gold Mining Co., Ld	1892	£200,000	150,000 50,000	£1 £1	18-10 £1	£4,873	Dr.	..	1/2 per share, 13th div	5%	$6 sellers
Oriental Consolidated Mining Co. Ld.	....	g $5,000,000	500,000	g $10	$10	none	....	..	Final of gold $0.65 for 1909 in all g. $1.15	..	32/6
DOCKS, WHARVES AND GODOWNS											
Fenwick (Geo.), & Co., Ld.	1889	$450,000	z 18,000	$25	$25	$25,275	Dr $8,460	31-12-09	$1¾ for year ending 31-12-06	....	$5
Hongkong & Kowloon Wharf & Godown Co., Ld.	1886	$3,000,000	60,000	$50	$50	$550,000 t $31,993 i $40,000	$4,848	31-12-09	$2½ for 1909	4½%	$53
Hongkong & Whampoa Dock Co., Ld.	1866	$2,500,000	50,000	$50	$50	i $88,214 v $221,000	$148,940	30-6-10	3% for half year ended 30-6-1909	..	$50
Shanghai Dock & Engin'g Co., Ld.	1906	Tls. 5,570,000	13) 55,700	Tls. 100	Tls. 100	Tls. 1,000,000	....	..	Final of Tls. 3½ making Tls. 6 in all for year 30-4-1910	8%	Tls. 67½
Shanghai & Hongkew Wharf Co., Ld.	1902	Tls. 3,600,000	36,000	Tls. 100	Tls. 100	b Tls. 697,257 r Tls. 50,000 e Tls. 125,000	....	..	Interim of Tls. 3 for 1910	7	Tls. 97½
LANDS, HOTELS AND BUILDINGS.											
Anglo-French Land Investment Co., Ld.	1906	Tls. 2,500,000	3) 25,000	Tls. 100	Tls. 100	Tls. 35,000	Tls. 4,314	29-2-09	Tls. 6 for year ending 29-2-10	5¾	Tls. 97 sellers
Central Stores, Ld.	----	$751,845	16) 50,123	$15	$15	n. $1,000	$1,000	31-12-08	8% for 1909	....	$11
Hongkong Hotel Co., Ld.	1866	$600,000 $400,000	12,000 8,000	$50 $50	$50 $25	$648,975 r $20,000	$21,477	30-6-10	$3 on old shares, $1.50 on new shares, for half year ending 30-6-10	5½%	$97 $70
Hongkong Land Investment & Agency Co., Ld.	1889	$5,000,000	50,000	$100	$100	e $250,000	$27,971	31-12-09	Interim of 3½ for 1910	7%	$100
Humphreys' Estate & Finance Co., Ld.	1887	$1,500,000	150,000	$10	$10	i $226,945 20) $25,856	$5,471	31-12-09	45 cents for 1909	5¾%	$6½ sellers
Kowloon Land & Bldg. Co., Ld.	1889	$300,000	6,000	$50	$30	none	$269	31-12-09	$2½ for 1909	8%	$33 buyers
Shanghai Land Investment Co., Ld.	1888	Tls. 3,900,000	78,000	Tls. 50	Tls. 50	Tls. 1,523.045 e Tls. 300,000	Tls. 63,969	31-12-09	Interim of Tls. 3 for 1910	6¾	Tls. 105
West Point Bldg. Co., Ld.	1889	$625,000	12,500	$50	$50	none	$1,958	31-10-09	Interim of $1.80 for 1910	8¾	$39
COTTON MILLS.											
Ewo Cotton Spinning & Weaving Co., Ld.	1895	Tls. 1,000,000	5) 20,000	Tls. 50	Tls. 50	Tls. 250,000	Tls. 10,991	31-10-09	Tls. 11 for year ended 31-10-09	8½	Tls. 90
Hongkong Cotton Spinning, Weaving & Dyeing Co., Ld.	1901	$1,250,000	125,000	$10	$10	e 20,000	$26,297	30-7-09	50 cents for year ending 31-7-08	....	$4¼ buyers

FAR EASTERN STOCKS AND QUOTATIONS—(CONTINUED.)

STOCK.	WHEN ESTABLISHED	CAPITAL.	NO. OF SHARES.	VALUE.	PAID UP.	RESERVE	AT WORKING ACCOUNT.	DATE.	LAST DIVIDEND.	Approximate Yield per cent. per annum at Present Quotation.	CLOSING QUOTATIONS
International Cotton Manufacturing Co., Ld.	1895	Tls. 750,000	6) 10,000	Tls. 75	Tls. 75	Tls. 175,000	Tls. 8,372	30-9-09	Tls. 7½ for year end. 30-9-09 (10%)	10%	Tls. 51
Laou-kung-mow Cotton Spinning & Weaving Co., Ld.	1895	Tls. 800,000	8,000	Tls. 100	Tls. 100	none	Tls. 4,829	31-12-08	Tls. 6 for 1909	10%	Tls. 50
Soy Chee Cotton Spinning Co., Ld	1895	Tls. 1,000,000	2,000	Tls. 500	Tls. 500	f Tls. 31,173	Tls. 31,173		Tls. 35 for 1909	17%	Tls. 250
MISCELLANEOUS											
Bell's Asbestos Eastern Agency, Ld.	1895	£5,377.10s.	11) 8,604	12/6	12|6	£1,500	£797	31-12-09	15% for 1909		$8 sellers
China-Borneo Co., Ld.	1903	$720,000	8) 60,000	$12	$12	$40,000	Nil.	31-12-08	5% for 1909	6½	$10 sellers
China Light & Power Co., Ld. Do. do. Special Shares	1901 1907	$300,000	50,000 17) 50,000	$5 $1	$5 $1	none	$50,242	31-7-10	60 cents for year ending 28-2-06		90 cts. buyers
China Provident Loan & Mortgage Co., Ld.	1898	a $1,250,000	7) 125,000	$10	$10	$80,000	$2,602	31-12-09	80 cents for 1909	10%	$7½ sellers
Dairy Farm Co., Ld.	1896	$300,000	40,000	$7½	$6	l $10,000 $10,000	$1,850	31-7-09	$1.20 for year ending 31-7-09	%	$17¾ buyers
Green Island Cement Co., Ld.	1897	$4,000,000	400,000	$10	$10	$14,000	$4,290	31-12-09	Interim of 15 cts. per share for 1910	15	$3¾
H. Price & Co., Ld	1907	$120,000	19) 15,000	$10	$10	none	$1,923.87	31-12-09	14% viz $1.40 for 1909	12%	$12
Hongkong Electric Co., Ld.	1889	$600,000	60,000	$10	$10	none	$11,798	28-2-10	A dividend of $1.20 per share and a bonus of 10 cts. per share for year end. 28-2-10.	6½	$20
Hongkong Ice Co., Ld.	1881	$125,000	5,000	$25	$25	k $150,000	$12,662	31-12-09	Interim of $2 pershare for 1910	----	$135 sellers
Hongkong Rope Manufacturing Co., Ld.	1883	$600,000	$60,000	$10	$10	$40,000	$9,176	31-12-09	Interim of $1 per share for 1910	9	$18 sellerss
Maatschappij tot Mijn-, Boschen Landbouwexploitatie in Langkat	1902	Gs. 2,500,000	25,000	Glds. 100	Glds. 100	21 Tls. 547,500 Tls. 547,500 f Tls. 63,914	Tls. 316,682	31-12-08	3rd Interim Div. of Tls. 15 making in all Tls. 37½ for 1910	5	Tls. 1020
Peak Tramways Co., Ld. Do. (New)	1907	$750.000	25,000 50,000	$10 $10	$10 $10	$20,000	$3,014	30-4-10	80 cents on fully paid shares & 8 cents on $1 paid shares for year ending 30-4-10	5¼ 5	$13 sellers $1½ sellers
Philippine Co., Ld.	1904	$750,000	75,000	$10	$10	none	Ps. 2,875	31-12-09	None	—	$8
Robinson Piano Co., Ltd	1900	$200,000	22) 4 000	$50	$50	$5,000	$61,138	31-8-08	6% for ½ year ending 30.9.07	—	$50
Shanghai-Sumatra Tobacco Co., Ld.	1902	Tls. 600,000	9) 30,000	Tls. 20	Tls. 20	Tls. 24,820 w Tls. 100,000	Tls. 5,250	31-10-08	No dividend this year	2	Tls. 115
South China Morning Post, Ld.	1903	$150,000	6,000	$25	$25	none	Dr. $31,096	31-8-09	None	—	$25
Steam Laundry Co., Ld.	1902	$100,000	20,000	$5	$5	none	$127,86	31-5-10	50 cents for year ending 30-5-10	8	$5 sales
Union Waterboat Co., Ltd.	1905	$500,000	15) 50,000	$10	$10	w $11,956	..	31-12-08	60 cents for year-end. 31-12-1908	6½	$6½
United Asbestos Oriental Agency, Ld.	1896	$100,000	10,000	$10	$4	$46,000	$471	31-5-10	15% per ordinary share for year ended 31-5-10	5	$11½ sellers
Watkins, Ltd.	1899	$100,000	10,000	$10	$10	none	$19,41	31-12-09	3½ for 1909		$3 sellers
Watson (A. S.) & Co., Ld.	1886	$900,000	90,000	$10	$10	e) $300,000 $25,000	$1,776	31-12-09	3% for 1909	—	$6½
Weismann Limited	1904	$30,000	3,000	$10	$10	$12,250	$67	31-7-09	10 per cent for year endg. 31.7.08.	10%	$12 buyers
William Powell, Ld.	1901	$105,000	15,000	$7	$7	none	$782	30-6-09	Final of 30 cents making 80 cents for year ending June 30th 1906	----	$2½
Societe des Pulpes et Papeteries du Tonkin		660,000	13,200	50 Haiphong	35 Currency	----	..	----	First year	----	$36 (Hk.Cy.) sel
RUBBERS											
Allagar Rubber Estates, Ltd.	1909	£85,000	29) 750,000	2|-	2|-	----	----	----	----------	----	5|-
Anglo-Malay Rubber Co., Ltd.	1905	£150.000	1,500,000	2|-	2|-	----	----	----	80% for year ending 31.12.09	----	24
Balgownie Rubber Estate, Ltd.	1905	†† $200,000	‡‡ 20,000	†† $1	†† $1	$7,400	$11,205	31-3-09	40% interim.	----	$10¾ [Singapore]
Castlefield Rub. Ld., [fully pd.]	1906	£35,000	27) 32,650	£1	£1	none	----	----	----------	----	121|6
Damansara (Selangor) Rub. Co.	1906	£110,000	25 110,000	£1	£1	nil.	£2,220	31-12-08	50% for 1909	----	152|6
Golconda Malay Rubber Co.	1907	£80 000	26 80,000	£1	£1	nil.	nil.	----	25% for 1909	----	102|6
Highland & Lnd. Para R. Co. Do. Do. [fully paid] Do. Do. [partly paid]	1906	£310,000	=181,454 123,546	£1 £1	£1 15|-	£8,784	----	----	35% for 1909	----	107|6
Kamuning (Perak) Rb. & Tin Co. do do A Shares do do B Shares	1909	£200,000	950,000 105,000	2|- £1	1|- £1	nil.	nil.	----	----------	----	5|- prem.
Kuala Lumpur Rubber Co., Ltd.	1906	£180,000	180,000	£1	£1	£4,000	1,82	----	30% for 1909	----	165|-
Linggi Plantations, Ltd. (ord.) Do. Do. (7% pref.)	1895 Reconst	£100,000	×900,000 10,000	2|- £1	2|- £1	----	---- ----	---- ----	50% interim.	---- ----	47|3
Ledbury Rubber Estates Ltd. Do. Do. (contrib.)	1908	£125,000	§§ 60,000 §§ 40,000	£1 £1	£1 7|6	----	----	----	17½% for 1909	----	71|-
Sagga Rubber Co. Ld.	1903	£20,000	24) 2,000	£1	£1	nil.	nil.	----	25% for 1909	----	270|-
Sandycroft Rubber Co.	1904	$100,000	50,000	$2	$2	$20.000	$1,275	31.1.08	50% interim	----	$24
Sekong Rubber Co., Ld	1908	£80,000	27) 80,000	£1	12/6	nil.	nil.	----	----------	----	11|3 prem.
Shelford Rubber State Ld.	1906	£65,000	65,000	£1	£1	nil.	£836	31.12.08	7½% for 1909	----	73|9
Singapore & Johore Rb. Co., Ld.	1903	$250,000	2,500	$2	$2	nil.	nil.	----	25% interim.	----	$13
Sungei Choh. Rb. State Co., Ld.	1907	£45,000	45,000	£1	£1	nil,	nil.	----	----------	----	92|6
Sungei Kapar Rubber Co.	1906	£110,000	23) 110,000	£1	£1	nil,	£3,448	31.12.08	37½% for 1909	----	14|-
Toerangie Rubber Co.	1910	30) £100,000	51,000	£1	7|6	----	----	----	First year	----	par.

LOANS AND DEBENTURES.	AGENTS FOR THE LOAN.	AMOUNT OF LOAN.	PAR VALUE.	OUTSTANDING BONDS.	WHEN PAYABLE.	CLOSING QUOTATIONS.	
China Government, 7 per cent. Silver Loan 1886 E	Hongkong & Shanghai Banking Corporation.	Tls. 767,200	Tls. 250	1914	Mar. 31st and Sept. 30th each year until Mar. 31st, 1917	par.	Plus interest
Hongkong Hotel Company, Ltd., 6 per cent. Mortgage Debentures of 1899 ‡		$750,000	$500	§ all	Half yearly, June 30th and December 31st	par.	
Shanghai & Hongkew Wharf Company, Ltd., 6 per cent. Debentures of 1902		Tls. 543,900	Tls. 100	--------	Half yearly, June 30th and December 31st	Tls. 103½	
Astor House Hotel Company, Ltd., 8 per cent. Debentures of 1903		Tls. 500,000	Tls. 100	--------	Half yearly, January 1st and July 1st	102½	
Chinese Engineering & Mining Co., Ltd., 6 per cent. Debentures of 1903 †	--------	£500,000	¶	£431,960	Half yearly, June 30th and December 31st	par.	
International Cotton Manufacturing Co., Ltd. 7% Debentures of 1901	Russo Chinese Bank	Tls. 500,000	Tls. 100	||	Half yearly, March 31st and Sept. 30th	Tls. 97½.	

a Authorized capital $2,000,000.
b Building Reserve Account.
c Capital Reserve Fund.
d Depreciation Fund.
e Equalization of Dividend Fund.
f Exchange and Investment Fluctuation Account.
g Gold Reserve Fund
h Exchange and Reserve Account.
i Insurance Fund.
j Reinsurance Fund.
k Contingencies Account.
l Legal Reserve Fund.
m Authorized Capital
n Sinking Fund.
o Raw Sugar Reserve Account.
p Premium on New Issue.
q Boiler Repairs and Renewals Account
r Repairs and Renewals Account.
s Silver Reserve Fund.
t Depreciation and Repair Account
u Underwriting Suspense Account.
v Special account
w Special Works Fund.
x Extra Reserve Fund.
y 72,560 owned by the Company.
z 7,200 shares unissued.
1 4,000 shares unissued.
2 First issue of 60,000, of which 10,411 unallotted.
3 5,000 shares unissued.
4 4,480 shares unissued.
5 5,000 shares unallotted.
6 1,616 shares unallotted.
7 75,000 shares unissued.
8 14,000 shares unissued.
9 17,000 shares unissued.
10 40.453 shares actually issued.
11 7,688 shares actually issued.
12 4,200 shares unissued.
13 500 shares unissued.
14 399 shares unissued.
15 22,277 shares unissued.
16 10,000 shares unissued.
17 Special shares are entitled to half of the profits.
18 Capital contributed by Chinese Government-Kuping Tls. 50,000.00.
19 12,000 issued only.
20 Typhoon and Floods Insurance Fund.
21 Special Cash Reserve.
22 1000 shares unissued.
23 10,000 shares unissued.
24 4595 part paid shares.
25 7,500 shares unissued.
26 10,000 shares unissued.
27 2.350 shares unissued.
28 25,000 shares unissued.
29 10,000 shares unissued.
30) 3,700 fully paid vendor shares and an option of 5,000 shares at par for 5 years granted to option holders.
*Based on last year's dividend.
** Based on present dividend.
§ 216 held by the Company.
|| Only Tls. 134,000 taken up.
¶ In certificates of £20 and £100.
‡ Redeemable in 10 years, or at option of Comp., the Company giving 6 months notice.
† Redeemable at par at rate of £10,000 per annum from 31st December 1903 to 31st December 95.
*** Redeemable at par on 30th June, 1915.
Dr. Deficit.
†† Singapore dollars.
‡‡ 4,880 shares unissued.
× 16,756 shares unissued.
§§ 25,000 shares unissued.
4140 shares unissued.

ADDITIONAL SHANGHAI SHARE QUOTATIONS

October 29, 1910

STOCK	CLOSING QUOTATIONS	HIGHEST AND LOWEST PRICES DURING THE WEEK	CAPITAL	NO. OF SHARES	VALUE	PAID UP	RESERVE	LAST DIVIDEND	WHEN PAID
Vulcan Iron Works, Limited....	Tls. 10		Tls. 500,000	1,000	Tls. 500	Tls. 500	—	Tls. 50 for year ended 31.8.06......	Nov. 1, 1906
Yangtsze Wharf & Godown Co. Limited.......................	Tls. 195		Tls. 250,000	2,500	Tls. 100	Tls. 100	Tls. 50,000	Tls. 15 for 1909......................	April 1, 1910
Wei-hai-wei Land & Building Co., Limited..................	Tls. 8 nominal		Tls. 91,850	3,674	Tls. 25	Tls. 25	—	Interim of $2.00 for 1909............	Aug. 8, 1909
Anglo-German Brewing Co., Limited............................	$80 sellers		$100,000	4,000	$100	$100	none	5% for 1909..........................	Mar. 12, 1910
Butler Tile Works, Limited.....	Tls. 23		Tls. 60,000	1,200	Tls. 50	Tls. 50	—	Tls. 3 for year ending 31.3.09......	June 8, 1909
Major Bros., Limited......	Tls. 40		Tls. 300,000	6,000	Tls. 50	Tls. 50	—	——	—
Oriental Ice Company, Limited	Tls. 25		Tls. 130,000	2,600	Tls. 50	Tls. 50	—	First year..........................	—
Scharffs Oil and Bone Mills, Ltd.	Tls. 40		Tls. 200,000	4,000	Tls. 50	Tls. 50	—	First year..........................	—
Shanghai Ice Company, Limited.	Tls. 13		Tls. 200,000	8,000	Tls. 25		—	6 for 1909............................	Mar. 14, 1910
Dunning & Company, Limited..	$33 sales		$100,000	2,000	$50	$50	—	$5 year ending 28.2.08......	Apr. 15, 1908
J. Llewellyn & Co., Limited.....	$60 nominal		$72,000	1,200	$60	$60	—	7.20 for 1909........................	May 1, 1910
Lane, Crawford & Company.....	$120		$250,000	2,500	$100	$100	—	10% for year 1909...................	Apr. 28, 1910
S. Moutrie & Company, Limited.	$20		$250,000	5,000	$50	$50	—	$2 for year ended March 31, 1909.	June 18, 1909
Weeks & Company, Limited...	$23		$400,000	20,000	$20	$20	$40,000	Final of 6% making 10% for 1909..	June 1, 1910
Dominion Rubber Co., Limited.	Tls. 30		Tls. 225,000	22,500	Tls. 10	Tls. 4	—	First year............................	—
Senawang Rubber Estates Company, Limited................	Tls. 50		Tls. 250,000	2,500	Tls. 100 Tls. 100	Tls. 100 Tls. 75	—	20% for year ending May 31 1910...	May 9, 1910
Tebong Rubber and Tapioca Estate, Limited..................	Tls. 20		£76,000	76,000	£1	£1	—	50 cents for 1909......	Sept 2, 1910
Shanghai Mercury, Limited.....	Tls. 55		Tls. 105,500	2,100	Tls. 50	Tls. 50	—	Final of 6% making 16% year 1909.	June 22, 1910
Shanghai Mutual Telephone Co., Limited.......................	Tls. 64		Tls. 675,000	13,500	Tls. 50	Tls. 50	—	Tls. 3 for 1907.......................	June 28, 1909
China Export, Import & Lumber Company, Limited.......	Tls. 75 sales		Tls. 350,000	500	Tls. 100	Tls. 50	—	5 p. c. for 1909......................	May 1, 1910
China Printing Co., Limited.....	Tls. 50		Tls. 750,000	1,500	Tls. 50	Tls. 50	—	7% 1908..............................	Apr. 18, 1909
Hirano Mineral Water Co., Ltd.	Y. 10		Y. 125,000	5,000	Y. 25	Y. 25	—	10%=yen 2½ for year ending 30th Sept. 08 Y. 1.20 for year ended Feb. 29................	Apr. 26, 1909
Shanghai Electric & Asbestos Company, Limited............	$21 sellers		$125,000	5,000	$25	$25	—	8% for year ended Feb. 28, 09....	June 21, 1909
Shanghai Electric Construction Company, Limited............	£6[5	£11	£320,000	32,000	£10	£10	—	First year..................	—

DEBENTURES

LOANS	PRICE—PLUS ACCRUED INTEREST	AMOUNT OF LOAN	OUTSTANDING	NOMINAL VALUE	RATE OF INTEREST	WHEN PAYABLE
Shanghai Municipal Debentures..........................1892	Tls. 97	Tls. 45,400	Tls. 45,400	Tls. 100	5 %	June & Dec.
do 1893	,, 100	,, 46,200	" 32,000	" 100	5½ ,,	Do
do 1894	,, 106	,, 60,000	" 60,000	" 100	6 ,,	Do
do 1895	,, 97	,, 107,600	" 32,600	" 100	5 ,,	Do
do 1896	,, 97	,, 117,300	" 131,800	" 100	5 ,,	Do
do 1897	,, 97	,, 268,400	" 268,400	" 100	5 ,,	Do
do 1898	,, 106	,, 60,000	" 60,000	" 100	6 ,,	Do
do 1900	,, 100	,, 31,700	" 31,700	" 100	5½ ,,	Do
do 1901	,, 106	,, 77,000	" 200,000	" 100	6 ,,	Do
do 1902	,, 106	,, 145,000	" 150,000	" 100	6 ,,	Do
do 1903	,, 106	,, 430,500	" 490,500	" 100	6 ,,	Do
do 1904	,, 106	,, 164,500	" 214,500	" 100	6 ,,	Do
do 1905	,, 106	,, 285,900	" 320,000	" 100	6 ,,	Do
do 1907	,, 106	,, 500,000	" 250,000	" 100	6 ,,	Do
do 1908	,, 250 scarce	,, 650,000	" 354,400	" 250	6 ,,	Do
do 1909	,, 97½	,, 300,000	" 250,000	" 100	6 ,,	Do
Chinese Imperial Government Loan......................1886 E	,, 102½	,, 354,400	"	" 100	7 ,,	Mar. & Sept
Shanghai Land Investment Co., Debentures...............1892	,, 95	,, 250,000	" 250,000	" 100	6 ,,	May & Nov.
do 1894	,, 104	,, 250,000	" 250,000	" 100	6 ,,	Mar. & Sept.
do 1896	,, 104	,, 250,000	" 250,000	" 100	5 ,,	June & Dec.
do 1900	,, 95	,, 250,000	" 250,000	" 100	6 ,,	April & Oct.
do 1901	,, 104	,, 250,000	" 100,000	" 100	6 ,,	June & Dec.
do 1901	,, 104	,, 100,000	" 400,000	" 100	5 ,,	May & Nov.
do 1902	,, 104	,, 400,000	" 250,000	" 100	6 ,,	June & Dec.
do 1905	,, 104	,, 250,000	" 815,900	" 100	6 ,,	Do
Shanghai Waterworks Co., Debentures.................. 1909	,, 104	,, 865,900	" ..	" 100	6 ,,	April & Oct.
Shanghai Gas Co., Debentures............. 1909	,, 106	,, 775,000	" 800,000	" 100	5 ,,	Do
Shanghai and Hongkew Wharf Co., Debentures...........1902	,, 105 scarce	,, 1,000,000	" 799,800	" 100	6 ,,	June & Dec.
Astor House Co., Debentures..............................1905	,, 100	,, 750,000	" 500,000	" 100	7 ,,	Do
British Municipal Council, Hankow.......................1901	Sh. ,, 100	H'kow Tls 100,000	H'kow Tls 100 000	" 100	7 ,,	June & Dec.
Shanghai Club Debentures..................................1907	,, 100	Tls. 170,000	Tls. 170,000	" 100	6 ,,	Do
Country Club Debentures......................................	,, 102½	,, 139,000	" 139,000	" 100	6 ,,	Do
do 1907	,, 102	,, 92,000	" 92,000	" 100	6 ,,	Do
Lane Crawford & Co., Debentures..........................1907	,, 105	,, 110,000	" 110,000	" 100	7 ,,	Mar. & Sept
Anglo-French Land Debentures............................1908	,, 102	,, 250,000	" 250,000	" 100	6 ,,	June & Dec.
Central Stores Ltd. Debentures.............................1908	,, 102½	,, 250,000	" 250,000	" 100	8 ,,	Do
Shanghai Mutual Tel. Co. Debentures..... 1909	,, 102½	,, 200,000	" 200,000	" 100	6 ,,	Do.

SINGAPORE SHARE QUOTATIONS

(COURTESY MESSRS. FRASER & CO., BROKERS, SINGAPORE, NOVEMBER 24, 1910)

Date o Formation	Capital	Capital paid up	No. of Shares Issued	Issue Value	Paid up	Reserve	Last Dividend	Name	Buyers.	Sellers.
								MINING		
1903	$300,000	300,000	30,000	10	10	....	30% for year ending 31-3-10	Belat Tin Mining Co., Ltd..................	4.50	5.00
1907	$300,000	225,000	22,500	10	10	....	....	Bruang Ltd..................................	5.25	6.50
1901	$600,000	600,000	60,000	10	10	25,000	6% for year ending 30-4-09........	Bruseh Hydraulic Tin Mining Co., Ltd......	. .	5.00
1907	$400,000	375,000	37,500	10	10	....	....	Kanaboi, Ltd................................	2.00	2.25
1901	£60,000	60,000	60,000	1	1	....	2[- interim 1909..........	Kinta Tin Mines, Ltd.......................	16.00	16.50
1905	$150,000	99,000	9,900	10	10	6,485.68	35% for year ending 31-12-07	Kuantan Tin Mining Co., Ltd................	2.00.	3.00
1906	£120,000	120,000	120,000	1	1	....	1[- interim 1909..........	Lahat Mines Ltd............................	8.50	9.25
1906	$450,000	450,000	45,000	10	10	....	....	Malacca Tin Dredging Co., Ltd..............	----	1.50
1906	£30,000	30,000	30,000	1	1	....	....	Malaya and Siam Corporation Ltd...........	....	7[6
1906	£250,000	179,500	500,000	5/-	5/-	....	....	Pahang Consolidated Co., Ltd...............	4[3	5[6
1907	£100,000	80,000	80,000	1	1	....	....	Pengkalen. Ltd.............................	6.25	4.25
1904	£100,000	80,000	80,000	1	1	....	6[- interim..........	Pusing Bahru Tin Mines, Ltd	. .	7.00
1904	£120,000	100,000	100,000	1	1	6,000	45% for year ending 30-6-07	Pusing Lama Tin Mines, Ltd.................	2.00	2.50
1907	$450,000	300,000	30,000	10	10	....	....	Rahman Hydraulic Tin, Ltd..................	10.25	10.50
1905	£27,000	27,000	27,000	1	1	....	1[- for 1907..........	Rambutan, Ltd..............................	. .	9.00
1892	£200,000	200,000	200,000	1	1	4,873	1[2 paid April, 1910..........	Raub Aust. Gold Ming. Co., Ltd,............	3.00	4.00
1905	£40,000	40,000	40,000	1	1	....	....	Redhills Tin Mining Co., Ltd...............	2.00	3.00
1900	$110,000	110,000	22,000	5	5	....	3% for year ending 22-1-09..........	Royal Johore Tin Mining Co., Ltd...........	....	1.25
1907	$550,000	500,000	50,000	10	10	....	....	Salak South, Ltd...........................	....	3.00
1907	£80,000	80,000	80,000	1	1	....	....	Sempam Tin Mines, Ltd......................	1.00	1.50
1906	$850,000	850,000	85,000	10	10	25,000	5% interim 1909..........	Serendah Hydraulic Tin Ming. Co., Ltd...	4.00	5.00
1899	$230,000	230,000	23,000	10	10	....	3% for ½ year ending 31-12-08........	Sipiau Tin Co., Ltd........................	1.50	2.00
1909	$200,000	$150,000	15,000	10	10	....	....	Sungei Gau Tin Mining Co., Ltd.............	. .	3.50
1907	£90,000	70,000	70,000	1	1	....	4[6 interim 1909..........	Tekka, Limited.............................	21.00	22.00
1906	£150,000	150,000	150,000	1	1	....	1[- interim 1909..........	Tongkah Harbour Tin Dredging Co., Ltd.	13.00	13.50
1902	£160,000	160,000	160,000	1	1	....	5[- during 1910	Tronoh Mines, Ltd..........................	14.25	14.75

SINGAPORE SHARE QUOTATIONS.—(CONTINUED.)

Date of Formation	Capital	Capital paid up	No. of Shares Issued	Issue Value	Paid up	Reserve	Last Dividend	Name	Buyers	Sellers.
								STERLING RUBBER		
1909	£85,000	78,225	782,250	2/-	2/-			Allagar Rubber Estates, Ltd	5/-	5/6
1905	£150,000	150,000	1,500,000	2/-	2/-		25% interim	Anglo-Malay Rub. Co., Ltd.	1.3.6	1.5.0
1909	£50,000	47,000	470,000	2/-	2/-			Batang Malaka Rubber Estates, Ltd.	3/3	3/9
1904	£30,000	26,750	26,750	1	1		35% interim	Batu Caves Rub. Co., Ltd.	16.10.0	17.0.0
1906	£80,000	67,800	67,800*l**	1	1		2½% for 1909	Batu Tiga (Selangor) Rubber Co., Ltd.	4.10.0	5.0.0
1909	£100,000	74,454	57,816	1	1			Bukit Kajang Rubber Estates, Ltd	2.8.6	2.10.0
			22,184*n**	1	15/-			" " " *part paid*	1.10.0	1.15.0p.
1907	£30,000	25,500	24,000	1	1		30% for year ending 30-6-10	Bukit Lintang Rubber Estates, Ltd.	4.10.0	5.0.0
			6,000	1	5/-			" " " *part paid*	2.2.6	2.7.6p.
1903	£70,000	66,700	66,700	1	1	2,000	25% interim	Bukit Rajah Rubber Co., Ltd.	15.10.0	16.0.0
1906	£35,000	35,000	35,000	1	1			Castlefield (K.) R. Estate, Ltd.	5.17.6	6.2.6
1909	£225,000	176,086	1,760,860	2/-	2/-			Chersonese (F.M.S.) Estates, Ltd	3/9	4/-
1904	£16,000	16,000	100,000	2/-	2/-		50% interim	Cicely Rubber Estates Co., Ltd.	2.2.6	2.5.0
			60,000	2/-	2/-		51½% interim	" " " " *5% Pref*	2.2.6	2.5.0
1905	£75,000	62,007	620,070	2/-	2/-	1,000	50% interim	Consolidated Malay Rub. Estates, Ltd.	1.3.6	1.4.6
1906	£110,000	110,000	110,000	1	1		50% for 1909	Damansara (Selangor) Rubber Co., Ltd.	7.2.6	7.12.6
1903	£600,000	447,200	447,200*a*	1	1			Duff Development Co., Ltd.	12/6	13/6
1909	£45,000	42,500	425,000	2/-	2/-		15% for 1909	Edinburgh Rub. Estates, (Selangor) Ld.	11/-	12/-
1907	£80,000	70,000	70,000	1	1		25% interim	Golconda Rubber Co., Ltd.	5.5.0	5.15.0
1906	£310,000	307,770	307,770	1	1	8,784	35% for 1909	Highlands & Lowds. Para Rub. Co., Ltd.	5.3.6	5.7.6
1904	£50,000	30,000	30,000	1	1	2,500	100% for year ending 30-6-10	Inch Kenneth Rubber Estates, Ltd	12.10.0	13.10.0
1909	£200,000	143,750	775,000*p*	2/-	1/-		15% for eleven monhts end. 30-6-10	Kam. (P.) R. & T. Co., Ltd. "A" Shares	5/3	5/9 p.
			105,000	1	1		" " " " "	" " " "B" "	---	nom.
1905	£70,000	70,000	70,000	1	1		20% interim	Kapar Para Rubber Estates, Co., Ltd.	8.17.6	9.10.0
1909	£35,000	£17,250	95,000	2/-	2/-			Kota Tinggi Johore Rubber Co., Ltd.	2/-	2/6
			155,000	2/-	1/-			" " "	-/1	0/6 p.
1906	£180,000	180,000	180,000	1	1	.....	75% interim	Kuala Lumpur Rubber Co., Ltd	8.2.6	8.10.0
1907	£100,000	100,000	1,000,000	2/-	2/		30% interim	Labu (F. M. S.) Rub. Co., Ltd	15/-	16/6
1907	£320,000	£252,067/10/-	198,930*v*	1	1	3,000	27½% for 1909	Lanadron Rubber Estates, Ltd	4.18.6	5.5.0
			70,850	1	15/-		27½% for 1909	" " " *part paid*	3.12.6	4.5.0p.
1908	£125,000	75,000	60,000*g**	1	1		17½% for 1909	Ledbury Rubber Estates Ltd.	3.10.0	3.17.6
			40,000	1	7/6		17½% for 1909	" " " *part paid*	2.0.0	2.5.0p.
1895	£100,000	98,324 8/-	883,244*w*	2/-	2/-	4,000	100% interim	Linggi Plantations Ltd.,	2.5.6	2.7.6
			10,000	1	1		7% for 1909	" " " *7% Pref*	---	nom.
1907	£160,000	140,000	1,400,000*k*	2/-	2/-		10% interim	London Asiatic R. & Produce Co., Ltd.	12/9	13/9
1909	£220,000	147,500	50,000	1	1	.....		Lumut Rubber Estates, Ltd.	---	nom.
			150,000	1	3/-			" " " " *part paid*	18/6	20/- p.
1906	£400,000	300,000	185,000	1	1		10% interim for 1909	Malacca Rubber Plants., Ltd.	6.17.6	7.2.6
			115,000	1	1	.....	" " "	" " " " *7½% Pref.*	6.17.6	7.2.6
1909	£210,000	181,250	1,812,500	2/-	2/-			Merlimau Rubber Estates, Ltd	6/-	6/3
1903	£30,000	22,500	225,000	2/-	2/-		75% interim	Pataling Rubber Estates Synd. Ltd	2.17.6	3.1.0
1906	£85,000	85,000	850,000	2/-	2/-		12½% interim 1909	Perak Rubber Plantations, Ltd	7/9	8/6
1909	£60,000	41,150	15,000*z**	1	1			Rembia Rubber Estates Ltd.	---	nom.
			35,000	1	15/-			" " " *6% Cum. Pref.*	4/-	7/6 p.
1904	£25,000	19,092	17,732*u*	1	1		25% interim	Sagga Rubber Company, Limited	11.0.0	12.0.0
			2,268	1	12/-					
1905	£100,000	100,000	71,378 28,622*l*‡	1	1	.....		Sapong Rubber and Tobacco Estates, Ltd.	1.5.0	1.7.6
1907	£100,000	100,000	100,000	1	1		15% interim	Seafield Rubber Co., Ltd	7.0.0	7.10.0
1898	£30,000	30,000	300,000	2/-	2/-	3,000	150% interim	Selangor Rubber Co., Ltd	3.0.0	3.3.6
1909	£50,000	36,000	40,000	1	18/-			Sendayan (F. M. S.) Rubber Co., Ltd	1.6.3	1.10.0p.
1906	£65,000	65,000	65,000	1	1		7½% for 1909	Shelford Rubber Estate, Ltd	3.11.3	3.15.0
1909	£150,000	78,500	14,000*i*‡	1	1			Sialang Rubber Estates, Ltd	1.0.0	1.5.0p.
			86,000	1	15/-					
1909	£120,000	100,000	100,000	1	1			Singapore Para Rubber Estates, Ltd.	2.10.0	2.15.0
1906	£200,000	192,500	1,925,000	2/-	2/-		10% interim	Straits Settlements (B.) Rub. Co., Ltd	7/3	7/6
1907	£60,000	50,000	50,000*p*‡	1	1	.....		Sungei Choh Rub.Estate, Co.Ltd.	4.15.0	5.2.6
1906	£110,000	100,000	1,000,000	2/-	2/-	.....	37½% for 1909	Sungei Kapar Rubber Co., Ltd	13/6	14/6
1907	£70,000	60,500	60,500	1	1			Sungei Salak Rubber Co., Ltd	4.0.0	4.10.0
1904	£60,000	59,500	59,500	1	1		12½% interim.	Sungei Way (Selangor) Rub. Co., Ltd	6.5.0	6.10.0
1908	£150,000	76,000	36,000	1	1			Tebrau (Johore) Rubber Co	3.17.6	4.0.0
			64,000	1	12/6			" " " *part paid*	2.1.6	2.5.0p.
1907	£200,000	200,000	200,000	1	1		5% interim	United Serdang (S.) R. Plantations, Ltd.	5.10.0	6.0.0
1908	£85,000	78,612	786,120	2/-	2/-	.....	20% interim	United Sumatra Rubber Estates, Ltd.	8/3	9/3
1904	£60,000	50,600	506,000	2/-	2/-	.....	250% for year ending 31-3-10	Vallambrosa Rubber Co., Ltd.	1.18.6	2.0.0
								DOLLAR		
1909	$120,000	105,000	105,000*w**	1	1			Alor Gajah Rubber Estate, Ltd	1.80	2.20
1909	$750,000	700,000	140,000	5	5	.....		Ayer Panas Rubber Estates, Ltd	6.00	6.25
1905	$200,000	151,200	151,200	1	1	5,250	40% interim	Balgownie Rub. Estate, Ltd	11.00	11.25
1910	$500,000	500,000	50,000	10	10			Bukit Timah Rubber Estates, Ltd	14.50	15.00
1910	$750,000	700,000	70,000	10	10			Changkat Serdang Estates, Ltd	8.00	8.25
1909	$300,000	300,000	300,000	1	1	.....		Glenealy Plantations, Ltd	2.10	2.25
1910	$200,000	164,285	32,857*m*‡	5	5	.....		Haytor Rubber States, Ltd	5.50	7.50
1910	$600,000	180,000	30,000	10	6			Henrietta Estates, Ltd.	---	par.
1909	$250,000	200,000	20,000	10	10			Indragiri (S.) R. and Gutta P. Co., Ltd.	13.50	14.50
1910	$350,000	300,000	300,000*s*‡	1	1	.....		Jimah Rubber Estates, Ltd	0.65	0.70
1910	$350,000	291,000	11,000	5	5	.....		Kelemak Rubber Estate, Ltd.	3.50	4.00
			59,000	5	4			" " " *part paid*,	2.00	1.50 dis.
1907	$300,000	170,000	20,000	10	8,50	....		Kombok Rubber Co., Ltd	15.00	prem
1910	$1,000,000	1,000,000	500,000	2	2			Malakoff Rubber Co., Ltd.	2.20	2.30
1910	$1,250,000	1,250,000	250,000	5	5			New Singapore Rubber Co., Ltd	5.50	6.00
1910	$700,000	600,000	600,090*q*‡	1	1			Nyalas Rubber Estates	0.40	0.50
1909	$400,000	400,000	80,000	5	5		5% interim	Pajam Limited	10.25	10.50
1909	$200,000	200,000	200,000	1	1			Pantai, Limited	1.05	1.15
1909	$500,000	450,000	45,000	10	10		7½% interim	Pegoh, Limited	31.00	32.00
1910	$450,000	295,000	45,000*f*‡	5	5	.....		Port Dickson Rubber Co., Ltd	10.00	12.00
			35,000	5	2	.....		" " " *part paid*	3.00	4.00 p.
1910	$200,000	150,000	150,000	1	1	.....		Pulo Daat Plantations, Ltd.	1.00	1.20
1904	$100,000	100,000	50,000*b**	2	2	20,000	50% interim.	Sandycroft Rubber Co., Ltd	26.00	26.50
1910	$1,500,000	1,500,000	1,500,000	1	1			Sembawang Rubber Plantations, Ltd	0.40	0.50
1903	$450,000	417,300	208,650	2	2		25% interim	Singapore & Johore Rub. Co., Ltd	12.75	13.00
1909	$250,000	100,000	10,000	10	10	.....		St. Helena Rubber Coy., Ltd	---	28.00
1910	$600,000	450,000	225,000*n*‡	2	2	.....		Sungei Bagan Rubber Co., Ltd	1.50	2.00
1909	$200,000	165,000	33,000	5	5			Teluk Anson Rubber Estate, Ltd	4.50	5.00
1910	$425,000	371,700	371,700*r*‡	1	1	.....		Ulu Pandan (Singapore) Rub. Estates Ltd.	0.45	0.55
1909	$1,000,000	737,500	737,500*y**	1	1	.....		United Singapore Rubber Estates, Ltd.	1.30	1.50
								GENERAL		
1903	£400,000	400,000	400,000	1	1			Singapore Electric Tramways, Co., Ltd.	3/3	4/3
1907	$1,500,000	1,065,150	25,000*d**	10	10		10% for year ending 31/12/08	Eastern Smelting Co. Ltd.	---	10.00 n.
			116,450	10	7		10% for year ending 31-12-08	" " " *part paid*	---	6.00 n.
1898	$360,000	360,000	36,000	10	10	170,000	10% interim	Fraser & Neave, Ltd.	26.00	27.00
1905	$2,400,000	2,400,000	18,000	100	---	75,000	2½% for year ending 31-10-08	Howarth Erskine, Ltd.	---	58.00
			6,000	100	---		7% for year ending 31-10-08	" " *7% Pref*	90.00	91.00
1896	$1,000,000	1,000,000	6,000	100	100	40,600	12% for year ending 31-12-09	Katz Brothers, Ltd. *Deferred*	---	125.00
			4,000	100	100		8% " " " " 09	" " *8% Cum. Pref*	---	nom.
1901	$34,000	34,000	3,400	10	10		20% for year ending 31-10-09	Maynard & Co., Ltd.	20.00	21.00
1899	$875,000	875,000	6,000	100	100	175,000	5% for year ending 31/12/09	Riley, Hargreaves & Co., Ltd	80.00	85.00
			2,750	100	100		7% for year ending 31/12/09	" " " " *7% Pref*	102.00	---
1897	£3,500,000	3,500,000	2,500,000	1	1	1,120,000	22½% for 1909	Shell Transport and Trading Co., Ltd	4.3.6	4.6.6
			100,000	10	10			" " " " " *Pref.*	11.5.0	12.0.0
1903	$600,000	250,000	25,000*n*	10	10	.....	12½% for year ending 30-6-10	Singapore Cold Storage Co., Ltd	20.50	21.50
1891	$30,000	30,000	600	50	50	23,000	10% for year ending 31-7-09	Singapore Dispensary Ltd.	50.00	52.50
1884	$200,000	200,000	2,000	100	100	75,000	15% interim	Straits Ice Co., Ltd	160.00	165.00
1890	$1,000,000	623,000	4,980	100	100	760,000*q*	5% interim	Straits Steam Ship Co., Ltd.	205.00	215.00
			2,500	100	50			" " " " " *part paid*	65.00	75.00p.
1887	$3,000,000	3,000,000	300,000	10	10	805,400*r* 1,400,000	10% & 5% bon. for half yr. end. 31/3/10	Straits Trading Co., Ltd	55.50	56.00
								DEBENTURES		
								Howarth Erskine, Ltd. 6% $600,000	---	par.
								Riley, Hargreaves & Co., Ltd. 6%,284,000	1%	3% p.
								Singapore Electric Tramways, Co., Ltd. 5% £350,000	---	---
								Singapore Municipal 5% 1,878,000	---	nom.
								" " 4½% of 1907 1,600,000	6%	7% p.
								" " 4½% of 1909 1,000,000	7%	8% p.
								" " 4% 602,900	---	7% dis

a { 152,800 unissued
43,949 6% debenture
e { 54,500 £1 Prefs issued
45,500 £1 " unissued
100,000 5/- Ord. "
f 6,250 unissued
k £40,000 6% Debentures 200,000 unissued

p 175,000 unisd. "A" shares
q Sundry Reserves.
r "
u 5,000 issued £1 prem.
v 50,220 unissued
w 16,756 "
*b** 221 7½% Debentures
*d** 8,550 unissued

*g** 25,000 unissued
*l** £10,000 Convertible 6% Debentures issued 12,200 shares unissued
*n** 20,000 unissued
*y** 262,500 "
*z** 10,000 "
i‡ 50,000 "

l‡ 6% Deb. Stock Convble.
m‡ 7,143 unissued.
n‡ 75,000 unissued.
o‡ 67,750 "
p‡ 10,000 "
q‡ 100,000 "
r‡ 53,300 "
s‡ 50,000 "

YOKOHAMA SHARE QUOTATIONS

COURTESY A. C. HUTTON POTTS, SHARE AND GENERAL BROKER, YOKOHAMA, NOVEMBER 24, 1910.

STOCKS.	CAPITAL.	NO. OF SHARES.	ISSUE VALUE.	AMOUNT PAID UP.	DATE.	LAST DIVIDEND.	FOR TERM.	CLOSING QUOTATION.
Brett & Co., Ltd.	-Y- 28,000	2,800	-Y- 10	-Y- 10	31-12-09	12½%	for 1 year	15 Sellers
Club Hotel, Ltd.	185,000	1,850	100	100	31-3-10	6%	for 1 year	70 Sales
Grand Hotel, Ltd.	500,000	5,000	100	100	31-6-10	5%	for ½ year	90 Sellers.
Helm Bros., Ltd.	186,000	3,720	50	50	31-12-10	17½%	for 1 year	87 Sales.
Langfeldt & Co., Ltd.	100,000	2,000	50	50	30-6-09	6%	for ½ year	60 Sellers.
C. Nickel & Co., Ltd. †	500,000	20,000	25	25	31-10-09	20%	for 1 year	57 Sales.
Thwaites, Limited	100,000	2,000	50	50	First Year	—	—	55 Sales.
Yokohama Engine and Iron Works *	500,000	10,000	50	50	31-5-09	—	for 1 year	40 Sellers.
Oriental Hotel, Ltd., Ordinary	250,000	3,000	50	50	31-8-07	12%	for 1 year	50 Sales
Oriental Hotel, Ltd., Preference		2,000	50	50		8%	for 1 year	52:50 Sales
The Union Estate and Investment Co., Ltd. ‡	1,000,000	10,000	100	100	30-9-09	6½%	for 1 year	100 Nominal.
The Clifford Wilkinson Tansan Mineral Water Co., Ltd. §	500,000	5,000	100	100	31-12-09	7%	for 1 year	100 Buyers.

† 285,000 unissued.
‡ 475,000 unissued.

*-Y- 390,000 issued.
§-Y- 375,800 issued.

DEBENTURE LOANS.	AMOUNT OF LOAN.	FACE VALUE OF DEBENTURES.	RATE OF INTEREST.	INTEREST PAYABLE.	CLOSING QUOTATION.
Brett & Company, Limited	11,500.00	100.00	7%	1 June and 1 Dec.	95 Sales.
Yokohama United Club	230,000.00	100.00	6%	30 June and 31 Dec.	102 Nominal.
Oriental Hotel, Limited	350,000.00	100.00	8%	1 April and 1 Oct.	103 Sales.
Union Estate and Investment Co., Limited	250,000.00	100.00	6%	30 June and 31 Dec.	95 Sellers.

JAPANESE STOCKS.	FACE VALUE.	AMOUNT PAID UP.	LAST DIVIDEND.	DIVIDEND PAYABLE.	CLOSING QUOTATION.
Bonds & Debentures.					
Exchequer Bonds 3rd issue	-Y-100	-Y-100	5%	March and Sept.	-Y-100.80
Railway Bonds (Ko-Gobu)	100	100	5%	June and Dec.	,, 102.40
4% Imperial Loan Bonds (1st issue)	100	100	4%	June and Dec.	,, 95.70
4% Imperial Loan Bonds (2nd issue)	100	100	4%	March and Sept.	,, 94.60
Imperial 5% Bonds	100	100	5%	March and Sept.	,, 100.60
Special 5% Bonds (issued 1906)	100	100	5%	June and Dec.	,, 102.00
Yokohama Water Works Bonds	100	100	6%	June and Dec.	,, 105.00
Yokohama City Public Loan Bonds	100	100	6%	March and Sept.	,, 105.50
Osaka City Harbour Construction Bonds	100	100	6%	June and Dec.	,, 104.00
Osaka City Public Loan Bonds	100	100	6%	June and Dec.	,, 104.00
Kawasaki Dock Yards Co.'s Debentures	100	100	7%	June and Dec.	,, 104.00
Tokyo Race Associations "	500	500	30%	June and Dec.	,, 190.00
Railways & Electric Trams.					
Tokyo Railway Company, Limited	50	50	5 2/5%	June and Dec.	,, 74.90
Yokohama Electric Tramway Company, Limited	50	50	6%	July and Jan.	,, 53.00
Keihin Electric Tramway Company, Limited	50	50	6%	June and Dec.	,, 45.30
Southern Manchurian Railway Co., Ltd.	100	20	6%	June and Dec.	,, 44.00
Hanshin Electric Tramway Co., Ltd.	50	50	12%	May and Nov.	,, 121.00
Cotton Spinnings.					
Kanegafuchi Cotton Spinning Company, Limited	50	50	14%	July and Jan.	,, 106.60
Fuji Gassed-yarn Company, Limited	50	50	14%	July and Jan.	,, 83.30
Tokyo Cotton Spinning Company, Limited	50	50	8%	July and Jan.	,, 41.50
Imperial Hemp Weaving Company, Limited	50	50	12%	July and Jan.	,, 70.00
Nisshin Boseki Kabushiki Kaisha	50	17½	7%	——	,, 11.40
Sugar & Beer Cos.					
Dai-nippon Sugar Refinery Company, Limited	50	50	....	May and Nov.	,, 37.50
Ensuiko Sugar Refinery Company, Limited	50	20	20%	June and Dec.	,, 46.50
Dai-nippon Beer Company, Limited	50	50	12%	July and Jan.	,, 78.80
Kirin Brewery Company, Limited	50	50	7%	July and Jan.	,, 52.50
Docks & Steamships.					
Yokohama Dock Company, Limited	50	33	12%	June and Dec.	,, 55.00
Uraga Dock Company, Limited	50	50	....	July and Jan.	,, 7.50
Kawasaki Dockyard Company, Limited	50	50	12½%	Feb. and Aug.	,, 54.00
Nippon Yusen Kaisha	50	50	10%	May and Nov.	,, 93.80
Hokkaido Tanko S. S. Company, Limited	50	50	5%	July and Jan.	,, 29.40
Miscellaneous.					
Tokyo Electric Light Company, Limited	50	50	12%	June and Dec.	,, 83.20
Tokyo Gas Company, Limited	50	50	13%	July and Jan.	,, 103.05
Yokohama Union Electric Light Company, Limited	50	50	14%	June and Dec	,, 107.00
Fuji Paper Mills	50	50	6%	June and Dec.	,, 30.50
Otaru Timber Company, Limited	50	50	....	March and Sept.	,, 33.00
Hoden Petroleum Company, Limited	50	50	20%	April and Oct.	,, 55.30
Tokyo Rope Manufacturing Company, Limited	50	50	18%	June and Dec.	,, 110.00
Japan Horse Improvement Company, Limited	50	50	....	March and Sept.	,, 13.50
Tokyo Stock Exchange Company	50	50	15 1/5%	June and Dec.	,, 209.30
Osaka Electric Light Company, Limited	50	50	16%	July and Jan.	,, 107.50
Kobe Electric Light Company, Limited	50	50	14%	July and Jan.	,, 105.50

BANGKOK SHARE QUOTATIONS

(COURTESY MESSRS. EDWARDS & CO., BANGKOK, SIAM.) NOV. 28, 1910

NAME.	BUYERS.	SELLERS.	LAST SALES.	ESTABLISHED.	CAPITAL.	NO. OF SHARES.	ISSUE VALUE.	AMOUNT PAID UP.	RESERVE FUND	LAST DIVIDEND
Siam Electricity Co., Ltd.	Tcs. 300	Tcs. 325	Tcs. 325	1901	£ 300,000	30,000	£ 10—	£ 300,000	Tcs. 491,338	12% Tcs. 4 bon.
Paknam Railway Co., Ltd.	,, 200	,, —	,, 220	1893	Tcs. 400,000	5,000	Tcs. 80	Tcs. 400,000	,, 87,566	14%
Siam Tramway Co., Ltd.	,, —	,, —	,, 108	1905	,, 1,450,000	6250 Shares 7250 Deb. 1000 P. Shares	,, 100	,, 2,230,000	,, 1,875	—
Meklong Railway Co., Ltd.	,, 90	,, 100	,, 90	1907	,, 2,230,000	22,300	,, 100	,, 223,000	,, 28,000	5%
Bangkok Manufact. Co., Ltd.	,, —	,, —	,, 132	1898	,, 400,000	4,000	,, 100	,, 400,000	,, 60,000	7% per for 6 months
Bangkok Dock Co., Ltd.	,, —	,, 135	,, 135	1865	,, 1,000,000	10,000	,, 100	,, 950,000	,, 220,000	
Siam Steam Packet Co.	,, 80	,, 909	,, 90	1898	,, 190,000	3,800	,, 50	,, 190,000	,, 34,000	5%
Siam Commercial Bank	,, 1,000	,, 1,500	,, 1,000	1906	,, 3,000,000	3,000	,, 1,000	,, 3,000,000	,, 338,850	4% for 6 mos.
Menam Motor Boat Co.,	,, 75	,, 90	,, 90	1905	,, 200,000	2,000	,, 100	,, 200,000	—	none
Transport Co., Motor,	,, —	,, 75	,, 100	1906	,, 200,000	2,000	,, 100	,, 200,000	—	—
Jenderata Rubber Co.*	,, —	,, 325— Ticals	,, 325 (for six calls)	1906	£ 40,000	4,000	£ 10	£ 7.-paid	—	—
Bagan Rubber Co.	,, —	,, 100	,, 100	1907	Tcs. 300,000	3,000	Tcs. 100	Tcs. 40 per share	—	—
Siam Steam Navigation Co., Ltd.	,, 300	,, 325	,, —	1909	,, 2,000,000	10,000	,, 200	—	,, 10,000	—
Siam Stone Works, Ltd.	,, —	,, —	100	1909	,, 350,000	3,500	,, 100	,, 350,000	—	6% half year
Kombok Rubber Co.	,, 25	,, 35	32	1906	$ 300,000	30,000	$ 100	$7, per Share	—	— —

PHILIPPINE SHARE REPORT

COURTESY B. A. GREEN, GENERAL SHARE, BOND AND INVESTMENT BROKER.—*Manila, P. I., December 10, 1910.*

NAME	CLOSING QUOT'N	WHEN INCORPORATED	AUTHORIZED CAPITAL	ISSUE VALUE OF SHARES	NUMBER OF SHARES	NUMBER OF SHARES SUBSCRIBED	PAID UP	RESERVE FUND	WORKING ACCOUNT	DATE	LAST DIVIDEND
American Drug Store	....	1908	₱ 100,000	₱1,000	100	51	₱1,000	₱5,000	₱ 50,000	June 30, 1910.	......
Antamok Valley Mining Co	₱0.40	1909	500,000	1	500,000	320,000	1	......	......	......	First year
Banco Español Filipino	₱255.	1851	3,000,000	200	15,000	12,980	200	408,715	......	July 1, 1910.	5% First Half 1910
Bayhay Valley Oil Co	100.	1909	100,000	100	1,000	......	100	......	......	......	First year
Benguet Commercial Co	85.	1908	200,000	100	2,000	736	100	......	......	......	8% for 1906
Benguet Consolidated Mining Co	0.50	1903	2,000,000	2	1,000,000	495,000	2	......	......	......	......
Bua Mining Co.											
Common	90.	1905	750.000	100	7,000	3,366	100	......	......	......	......
Preferred	140.			100	500	500	100	......	......	......	......
Cadwallader-Gibson Lumber Co	......	1908	1,000.000	100	10,000	8,650	100	......	......	......	......
Camote-Clayton Mining Co	......	1909	400,000	10	40,000	26,000	10	......	......	......	First year
Compania Maritima	50.	1894	510,000	100	5,100	5,100	100	......	......	......	20% for 1902
East Batan Coal Mining Co	33.	1909	3,000,000	50	60,000	40,000	50	......	......	......	First year
El Varadero de Manila	75.	1885	450,000	100	4,500	4,500	100	288,955	134,715	Aug. 31, 1910	3½% interim 1910
Electrical Supply Co	......	1909	100,000	100	1,000	280	72	......	......	......	First year
Export & Import Lumber Co	......	1908	200,000	200	1,000	1,000	200	......	......	......	......
Escolta Press Inc	100.	1907	50,000	100	500	320	100	......	......	......	12% for 1909
Fabrica de Hielo de Manila	60.	1894	350,000	50	7,000	7,000	50	......	......	......	9% interim for 1910
Germinal Cigar Factory	525.	1900	1,500,000	500	3,000	3,000	500	......	......	......	12% for 1909
H. E. Heacock & Co	......	1909	100,000	100	1,000	800	100	......	......	......	First Year
Headwaters Mining Co	10.	1908	600,000	10	60,000	59,800	10	......	......	......	......
Insular Lumber Co	140.	1907	2,000,000	200	10,000	9,000	200	......	......	......	......
Lepanto Mining Co	......	1906	1,000,000	100	10,000	8,000	100	......	......	......	......
Juan Seiboth Co	......	1908	150,000	20	7,500	500	20	......	......	......	......
La Concha Button Factory	90.	1905	75,000	100	750	530	100	......	......	......	15% for 1909
Los Banos Improvement Co	200.	1908	100,000	200	500	500	200	......	......	......	16% for 1908
Lambert, Springer Co	......	1908	200,000	1,000	200	80	1,000	......	......	......	......
Luzon Stevedoring Co	25.	1909	250,000	25	10,000	4,200	25	......	......	......	......
Luzon Sugar Refining Co	....18.	1882	700,000	100	7,000	7,000	100	......	......	......	3% for 1907
Manila Electric Ry. & Light Co	140.	1903	12,000,000	200	60,000	......	200	......	......	......	4% for 1909
Manila Hotel Co	100.	1909	400,000	100	4,000	3,500	100	......	......	......	Under Construction
Mindanao Herald Publishing Co	......	1907	15.000	100	150	75	100	......	......	......	½% for 1908
Muyot Mining Co	3.	1909	500,000	10	50,000	......	10	......	......	......	First Year
Paracale Gold Dredging Co	15.	1907	£10,000	£1	10,000	10,000	£1	......	......	......	£1 for 1908–9
Paracale Ext. Gold Dredging Co	10.	1909	₱450,000	₱10	45,000	......	₱10	......	......	......	First Year
Philippine Publishing Co	120.	1907	600,000	200	3,000	2,187	200	......	......	......	10% interim for 1910.
Philippine Co., Ltd	5.	1904	750,000	10	75,000	75,000	10	......	......	......	......
Philippine Gold Dredging Co	10.	1907	200,000	10	20,000	20,000	10	......	......	......	......
Philippine Exploration Co	10.00	1908	2,000,000	10	200,000	120,000	10	......	......	......	......
Port Banga Lumber Co	......	1908	100,000	100	1,000	934	100	......	40,000	Oct 1, 1910.	......
Rosenstock Publishing Co	......	1908	75,000	10	7,500	6,000	10	......	......	......	......
San Nicolas Iron Works	100.	1901	300,000	500	600	600	500	......	......	......	15% for 1903
San Mauricio Gold Mining Co	35.	1908	4,000,000	200	20,000	20,000	200	......	......	......	......
Sanitary Steam Laundry	22.	1908	100,000	20	5,000	3,900	20	......	......	......	......
Tarlac Railway Co	65.	1906	150,000	100	1,500	1,500	100	......	......	......	......
Tumbaga Mining Co	13.	1909	1,000,000	40	25,000	24,125	40	......	......	......	First Year
Union Hemp Machine Co	......	1909	50,000	10	5,000	2,600	10	......	......	......	First Year
Walter E. Olsen Co	100.	1909	500,000	100	5,000	2,033	100	......	......	......	First Year
Zamboanga Cold Storage Co	125.	1903	40,000	100	400	200	100	......	......	......	20% for 1909

PHILIPPINE BONDS

	DATED	AUTHORIZED	ISSUED	OUTSTANDING	PAR VALUE	RATE OF INT.	WHEN PAYABLE	LAST QUOTATION
Philippine Friar Land Bonds	Feb. 1st, 1904	$7,000,000	$7,000 000	$7,000,000	$ 100	4%	Feb. 1, 1914	104⅝
Public Works and Permanent Improvement Bonds	March 1, 1905	$5,000,000	$2,500,000	$2,500,000	$ 100	4%	March 1, 1915	104⅝
Do.	Feb. 1, 1906		$1.000,000	$1,000,000	$ 100	4%	Feb. 1, 1916	104⅝
Manila Sewer and Water Works Improvement Bonds	June 1, 1905	$4,000,000	$1,000,000	$1,000,000	$ 100	4%	June 1, 1915	104¼
Do.	Jan. 2, 1907		$2,000,000	$2,000,000	$ 100	4%	Jan. 2, 1917	104⅝
Philippine Railway First Mortgage Four per cent Thirty Year Sinking Fund Gold Bonds *	July 1, 1907	$15,000,000	$5,736,000	$5,736,000	$1000	4%	July 1, 1937	97
B. P. O. Elks. First Mortgage 7% Five-Fifteen Year Sinking Fund Gold Bonds	July 1, 1908	$75,000	$75,000	$75,000	$ 50	7	July 1, 1923	50½

*Payment of interest guaranteed until maturity or redemption by the Philippine Government.

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Yokohama Specie Bank, Ltd.

BOILER MAKERS
Babcock & Wilcox (D. W. Bell)

BOILERS (PATENT WATER TUBE STEAM)
General Electric Co.
Jardine Matheson & Co.

BREWERIES
San Miguel Brewery

BRIDGE-BUILDERS
Atlantic, Gulf and Pacific Co
White & Co., Inc., J. G.

BROKERS, GENERAL
C. S. Nicholson

BUILDING MATERIALS
California-Manila Lumber Com. Co.
Malthoid Paraffine Paint Co.
W. H. Anderson & Co.
Samuel McGregor & Co.

CABLES, TELEPHONE, TELEGRAPH SUPPLIES
David W. Bell
W. T Henley's Telegraph Works Co., Ltd.
Melchers & Co.

CARRIAGES
Wilbur H. Murray Mfg. Co.

CEMENT
Anderson & Co., W. H.
British American Tobacco Co.
Chee Hsin Cement Co., Ltd.
Chinese Engineering and Mining Co., Ltd.
Green Island Cement Co., Ltd.
Racine, Ackermann & Co.

CIGAR AND CIGARETTE MANUFACTURERS
Alhambra Cigar & Cigarette Factory.
Castle Bros.-Wolf & Sons
Cia. Gral. de Tabacos de Filipinas
Germinal Cigar Factory
Olsen & Co., Walter E.
La Prueba

CIVIL ENGINEERS
Eastern Eng. Co.
C. G. Young

COAL DEALERS
Chinese Engineering and Mining Co., Ltd.
The Mitsui Bussan Kaisha
South Manchuria Railway Co.
The Han-Yeh-Ping Iron & Coal Co. Ltd.

COAL HANDLING MACHINERY
Atlantic, Gulf & Pacific Co.

COFFEE DEALERS (WHOLESALE)
M. A. Clarke (Mayon)

CONTRACTORS, (GENERAL)
Bohler Bros. & Co.
Frank L. Strong
Germann & Co., Ltd.
Gordon & Co.
Siemssen & Co.
White, & Co. Inc., J. G

CONTRACTORS, ELECTRICAL
Arnhold, Karberg & Co.
Electrical Supply Co. Inc.
Germann & Co., Ltd.
Shanghai Electric & Asbestos Co., Ltd.
Shewan Tomes & Co.
Frank L. Strong
Siemens Shuckert
Siemssen & Co.

CONSULTING ENGINEERS
Carmichael & Clarke.
Germann & Co., Ltd.
White & Co., Inc. J. G.
C. G. Young

DIVING APPARATUS
A. J. Morse & Son

DREDGERS
Middleton & Co., Ltd.
Melchers & Co.
New York Engineering Co.
Rose, Downs & Thompson, Ltd.

DRY CELLS
F. H. Thompson.

DRY GOODS, WHOLESALE
The H. B. Chaflin Co.

EDUCATIONAL
I. C. S. Correspondence Schools.

ELECTRIC LIGHTING PLANTS
Anderson Meyer & Co.
Arnhold, Karberg & Co.
Electrical Supply Co Inc.
Fearon, Daniel & Co.
General Electric Co.
Germann & Co., Ltd.
Siemens Snuckert
Siemssen & Co.
Shewan, Tomes & Co.
Western Electric Co.

ELECTRICAL SUPPLIES
Allis-Chalmers Co.
Anderson Meyer & Co.
Arnhold Karberg & Co.
Electrical Supply Co. Inc.
Jardine, Matheson & Co.
Babcock & Wilcox (D. W. Bell)
Belliss & Morcom (D. W. Bell)
Fearon, Daniel & Co.
General Electric Co.
Melchers & Co.
Shanghai Electric & Abestos Co. Ltd.
Shewan, Tomes & Co.
Siemens Shuckert
Siemssen & Co.
Western Electric Co.

ENGINES (PUMPING)
Allis-Chalmers Co.
Belliss & Morcom (D. W. Bell)
Siemssen & Co.

EXCAVATORS AND ELEVATOR
Dickeson, Jones Co.
Rose, Downs & Thompson, Ltd
Siemssen & Co.

EXPLOSIVES
Jardine Matheson & Co.,

FIBRE MACHINERY
Dailey, C. E.

FOOD PRODUCTS
Anderson & Co., W. H.
Swift & Co.

GAS. ENGINES
Fairbanks, Morse & Co.
Castle Bros.-Wolf & Sons
Detroit Engine Works
Shanghai Gas Co., Ltd.
Truscott Boat Mfg. Co.
Melchers & Co.

HOTELS
Astor House Hotel Co.
Hotel St. Francis
Tokyo Imperial Hotel
New Metropole Hotel

ICE MACHINERY
Vulcan Iron Works
Melchers & Co.

INJECTORS
Penberthy Injector Company.

INSURANCE
Stevenson & Co., Ltd., W. F.

JOURNALS, SCIENCE
The Philippine Journal of Science

LIFE INSURANCE
China Mutual Life Insurance Co., Ltd.
Shanghai Life Insurance Co., Ltd.

LITHOGRAPHERS
The Wen Ming Press.

LUMBER DEALERS
Cadwallader-Gibson Lumber Co.
California-Manila Lumber Com. Co.
Robert Dollar Co.
Export and Import Lumber Co.
Jardine, Matheson & Co.
Port Banga Lumber Co.

MACHINERY MERCHANTS
Anderson, Meyer & Co.
Arnhold Karberg & Co.
Shanghai Machine Co.
Fearon, Daniel & Co.
Frank L. Strong
Stuart S. Harvey
Siemssen & Co.
Schuchardt & Schutte.

MARINE ENGINES
Fairbanks Morse & Co.
Truscott Boat Mfg. Co.
Grand Rapids Gas, Engine & Yacht Co.

MILL MACHINERY
Rose, Downs & Thompson Ltd.

MINING MACHINERY
Allis-Chalmers Co.
Germann & Co., Ltd.
Melchers & Co.
New York Engineering Co.
Shewan, Tomes & Co.
Siemssen & Co

MINING COMPANIES
Chinese Engineering & Mining Co.
South Manchuria Railway Co.
Mitsui Bussan Kaisha

MOTORS
Grand Rapids Gas, Eng. & Yacht Co.
The Gray Motor Co.
The Ferro Machine & Foundry Co.

MOTOR LAUNCHES
Earnshaw, M. & Co.
Gas Engine & Power Co. and Charles L. Seabury & Co. (Consolidated)
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Michigan Steel Boat Co.

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PHOTO ENGRAVING
The Commercial Press

PULLEYS (STEEL)
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Shanghai Machine Co.
The Gardner Governor Co.

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Imperial Chinese Railways
Shanghai-Nanking.
South Manchuria
Southern Pacific Co.

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Arnhold Karberg & Co.
Baldwin Locomotive Works.
Fearon, Daniel & Co.
P. Herbrand & Co.
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Melchers & Co.
Mitsui Bussan Kaisha
Siemssen & Co.
Westinghouse Brake Co., Ltd.
Shewan Tomes & Co.
Shanghai Machine Co.

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Trussed Concrete Steel Co.

ROOFING PAPER
Malthoid

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Santa Mesa Rope Works.
Ynchausti & Co.

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Gordon & Co.

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Export and Import Lumber Co.
Insular Lumber Co.
Jardine, Matheson & Co.
Cadwallader-Gibson Lumber Co.
Port Banga Lumber Co.

SERUM
Bureau of Science

SHIP-CHANDLERY
Ynchausti & Co.

SHIPPING AGENTS
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Cia. General de Tabacos
Shewan, Tomes & Co.
Stevenson & Co., Ltd.
Warner, Barnes & Co., Ltd.

SHIPBUILDING AND REPAIRS
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The Kawasaki Dockyard Co. Ltd.
Kiangnan Dock and Engineering Co., Ltd.
Mitsu Bishi Dock and Engineering Works
New Engineering and Shipbuilding Works, Ltd.
Shanghai Dock and Engineering Co., Ltd.
The Taikoo Dockyard and Engineering Company of Hongkong, Limited
Earnshaw, M. & Co.
Vulcan Iron Works, Ltd.

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China and Manila S. S. Co., Ltd.
China Merchants Steam Nav. Co.
Cia. General de Tabacos
Nippon Yusen Kaisha
Occidental and Oriental S. S. Co.
Pacific Mail S. S. Co.
Toyo Kisen Kaisha S. S. Co.
Transatlantica S. S. Co.
Ynchausti & Co.

STEEL MANUFACTURERS
United States Steel Products Export Co.
Zimmerman Steel Co.

STEEL WORKS
Bohler Bros. & Co.
The Han-Yeh-Ping Iron and Coal Co. Ltd.
Hanyang Iron & Steel Works.

STRUCTURAL STEEL
American Bridge Co.
Bohler Bros. & Co.
A. Gulf & Pacific Co.

SUGAR MACHINERY
Honolulu Iron Works.

TANKS
Atlantic, Gulf & Pacific Co.
Pacific Tank and Pipe Co.
Shanghai Dock & Engineering Co., Ltd.

TELEPHONES
The Western Electric Co.

TILES AND BRICKS
C. Fressel & Co.
Green Island Cement Co., Ltd
Chinese Eng. Mining Co.

TOBACCO DEALERS
British American Tobacco Co., Ltd
Cia. General de Tabacos
Olsen & Co., Walter E.

TOOLS
Lodge & Shipley Machine Tool Co.
Shanghai Machine Co.
Lambert-Springer Co.

TYPEWRITERS
The Fox Typewriter
Remington Typewriter Co.

WINDMILLS
Fairbanks, Morse & Co.
Defiance Machine Works.

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